```
=> fil reg
FILE 'REGISTRY' ENTERED AT 09:13:42 ON 05 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    2 MAY 2003  HIGHEST RN 509953-09-7
DICTIONARY FILE UPDATES:   2 MAY 2003  HIGHEST RN 509953-09-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d sta que l10
L1              STR
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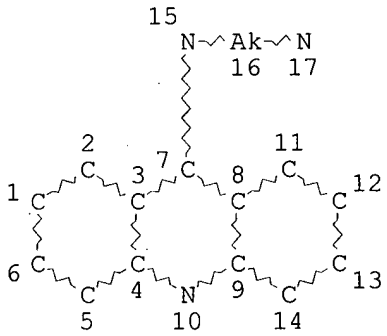


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NODE ATTRIBUTES:
CONNECT IS E2  RC AT  16
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   1
NUMBER OF NODES IS  17

STEREO ATTRIBUTES: NONE
L3          2001 SEA FILE=REGISTRY SSS FUL L1
L4              STR
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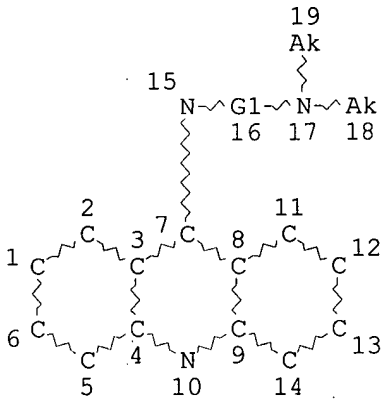
Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov



REP G1=(3-3) CH2
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

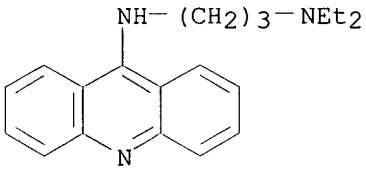
GRAPH ATTRIBUTES:
RSPEC 1
NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE

L6	13	SEA	FILE=REGISTRY	SUB=L3 CSS FUL L4	
L7	3	SEA	FILE=REGISTRY	ABB=ON	PLU=ON L6 AND C20H25N3
L8	1794	SEA	FILE=REGISTRY	ABB=ON	PLU=ON 2508.108.26/RID AND L3
L9	3	SEA	FILE=REGISTRY	ABB=ON	PLU=ON L8 AND L6 NOT L7
L10	6	SEA	FILE=REGISTRY	ABB=ON	PLU=ON (L7 OR L9)

=> d ide can tot l10

L10 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 110166-25-1 REGISTRY
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-diethyl-, hydrochloride (9CI) (CA INDEX NAME)
MF **C20 H25 N3 . x Cl H**
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)
CRN (55468-73-0)

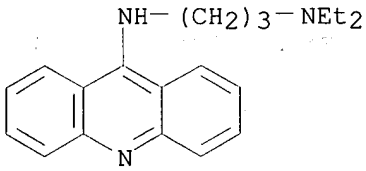


●x HCl

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 107:108837

L10 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 55468-73-0 REGISTRY
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-diethyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9-[(3-Diethylaminopropyl)amino]acridine
MF **C20 H25 N3**
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1957 TO DATE)
6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:232569

REFERENCE 2: 123:132316

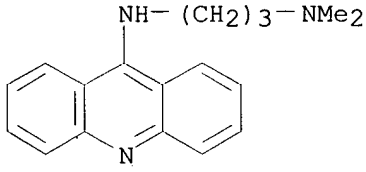
REFERENCE 3: 107:108837

REFERENCE 4: 101:34661

REFERENCE 5: 83:22906

REFERENCE 6: 83:1516

L10 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 24431-10-5 REGISTRY
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-, hydrochloride (8CI)
MF C18 H21 N3 . x Cl H
LC STN Files: CA, CAPLUS, TOXCENTER
CRN (13365-37-2)



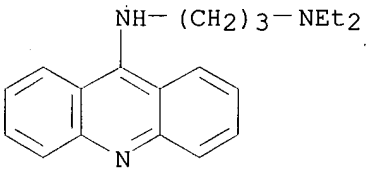
●x HCl

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 107:108837

REFERENCE 2: 71:12218

L10 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 23159-13-9 REGISTRY
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-diethyl-, dihydrochloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acridine, 9-[[3-(diethylamino)propyl]amino]-, dihydrochloride (8CI)
OTHER NAMES:
CN C 494
MF **C20 H25 N3 . 2 Cl H**
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
(*File contains numerically searchable property data)
CRN (55468-73-0)



●2 HCl

9 REFERENCES IN FILE CA (1957 TO DATE)
9 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 103:100552

REFERENCE 2: 94:169667

REFERENCE 3: 94:1490

REFERENCE 4: 85:72040

REFERENCE 5: 83:1340

REFERENCE 6: 71:61178

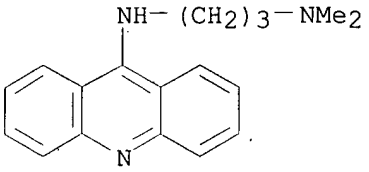
REFERENCE 7: 44:51206

REFERENCE 8: 44:51205

REFERENCE 9: 41:8178

L10 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 13365-37-2 REGISTRY
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]- (8CI)
OTHER NAMES:
CN 9-(3'-Dimethylaminopropylamino)acridine
CN 9-[[3-(Dimethylamino)propyl]amino]acridine
DR 23002-08-6
MF C18 H21 N3
CI COM

LC STN Files: BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAPLUS, CASREACT, MEDLINE, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

33 REFERENCES IN FILE CA (1957 TO DATE)
33 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:189694

REFERENCE 2: 133:344161

REFERENCE 3: 133:26844

REFERENCE 4: 129:170225

REFERENCE 5: 127:325947

REFERENCE 6: 126:115559

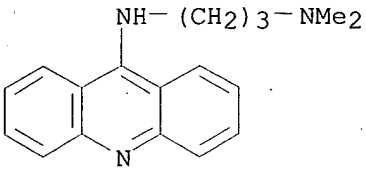
REFERENCE 7: 121:124653

REFERENCE 8: 116:101822

REFERENCE 9: 114:2729

REFERENCE 10: 113:168105

L10 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 1092-03-1 REGISTRY.
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-, dihydrochloride (7CI, 8CI)
OTHER NAMES:
CN C 137
MF C18 H21 N3 . 2 Cl H
LC STN Files: CA, CAOLD, CAPLUS, RTECS*, TOXCENTER
(*File contains numerically searchable property data)
CRN (13365-37-2)



●2 HCl

7 REFERENCES IN FILE CA (1957 TO DATE)
7 REFERENCES IN FILE CAPLUS (1957 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 110:33326

REFERENCE 2: 93:62303

REFERENCE 3: 87:34513

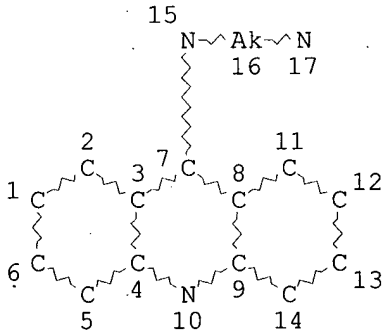
REFERENCE 4: 84:69240

REFERENCE 5: 84:53851

REFERENCE 6: 62:2982

REFERENCE 7: 62:2981

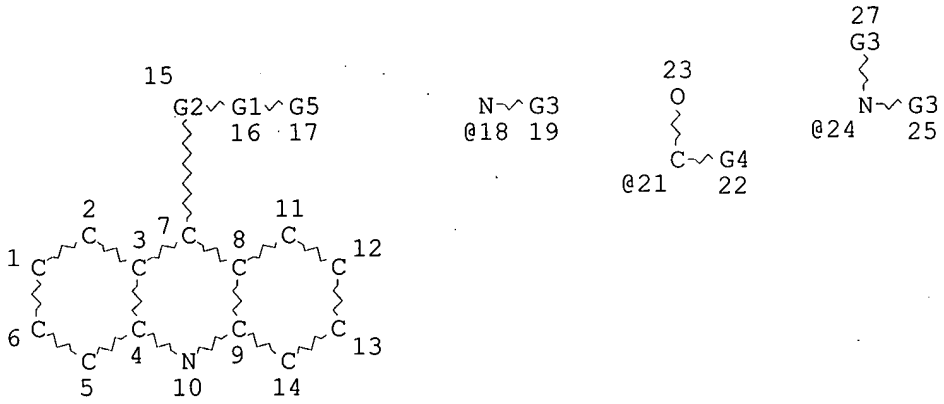
=> d sta que l16
L1 STR



NODE ATTRIBUTES:
CONNECT IS E2 RC AT 16
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 1
NUMBER OF NODES IS 17

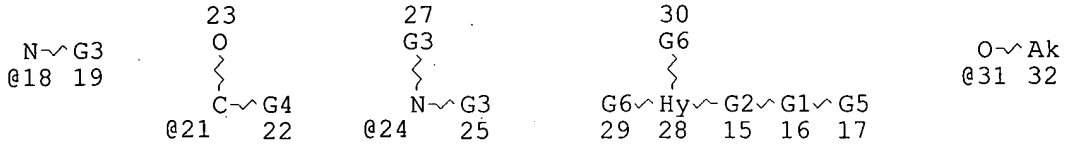
STEREO ATTRIBUTES: NONE
L3 2001 SEA FILE=REGISTRY SSS FUL L1
L8 1794 SEA FILE=REGISTRY ABB=ON PLU=ON 2508.108.26/RID AND L3
L11 STR



REP G1=(3-3) CH2
VAR G2=N/18
VAR G3=AK/CY/21
VAR G4=AK/CY
VAR G5=NH2/18/24
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 1
CONNECT IS M1 RC AT 2
CONNECT IS M1 RC AT 5
CONNECT IS M1 RC AT 6
CONNECT IS M1 RC AT 11
CONNECT IS M1 RC AT 12
CONNECT IS M1 RC AT 13
CONNECT IS M1 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 1
NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE
L13 248 SEA FILE=REGISTRY SUB=L8 CSS FUL L11
L14 STR



REP G1=(3-3) CH2
VAR G2=N/18
VAR G3=AK/CY/21
VAR G4=AK/CY
VAR G5=NH2/18/24
VAR G6=H/X/OH/AK/31/NH2/18/24/CY
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS PCY AT 28
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E13 C E1 N AT 28

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 16

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STEREO ATTRIBUTES: NONE
L16          125 SEA FILE=REGISTRY SUB=L13 CSS FUL L14

100.0% PROCESSED    248 ITERATIONS                    125 ANSWERS
SEARCH TIME: 00.00.01


=> d his

     (FILE 'HOME' ENTERED AT 08:40:40 ON 05 MAY 2003)
                SET COST OFF

     FILE 'REGISTRY' ENTERED AT 08:40:55 ON 05 MAY 2003
L1                STR
L2             50 S L1
L3           2001 S L1 FUL
                SAV L3 KWON082/A
L4                STR L1
L5              1 S L4 CSS SAM SUB=L3
L6             13 S L4 CSS FUL SUB=L3
                SAV L6 KWON082A/A
L7              3 S L6 AND C20H25N3
L8           1794 S 2508.108.26/RID AND L3
L9              3 S L8 AND L6 NOT L7
L10             6 S L7,L9
L11               STR L1
L12             9 S L11 CSS SAM SUB=L8
L13           248 S L11 CSS FUL SUB=L8
                SAV L13 KWON082B/A
L14               STR L11
L15             8 S L14 CSS SAM SUB=L13
L16           125 S L14 CSS FUL SUB=L13
                SAV L16 KWON082C/A
L17           119 S L16 NOT L10

     FILE 'HCAOLD' ENTERED AT 08:50:03 ON 05 MAY 2003
L18             1 S L10
L19            17 S L17
                SEL AN
                EDIT /AN /OREF

     FILE 'HCAPLUS' ENTERED AT 08:51:22 ON 05 MAY 2003
L20            33 S E1-E17
                SEL DN 2 4 6 8 10 13 15 17 19 21 23 25 27 29 33
L21            18 S L20 NOT E18-E32
                SEL DN 11 18
L22            16 S L21 NOT E33-E34
L23            56 S L10
L24             0 S L22 AND L23
L25            97 S L17
L26           143 S L23,L25
                E E VILLAR H/AU
                E VILLAR H/AU
L27           111 S E3,E5,E12,E14
                E LABORDE E/AU
L28            48 S E3-E7
                E LA BORDE E/AU
                E US20020169183/PN
L29             1 S E3
                E US2001-274535/AP,PRN
L30             1 S E5
```

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L31           1 S L26 AND L27-L30
                E TELIK/PA,CS
L32          35 S E3-E9
L33           1 S L26 AND L32
L34           1 S L31,L33
                E FAS/CT
                E E4+ALL
L35        5492 S E7,E6
                E E21+ALL
L36        3287 S E5,E4
                E E15+ALL
L37       49327 S E5,E4
                E E3+ALL
L38       55816 S E3-E7
L39           1 S L26 AND L35-L38
                E FAS/CW
L40           1 S E3 AND L26
                E HYPERPLAS/CT
L41         737 S E4-E22
                E E4+ALL
L42        1166 S E2+NT
                E AUTOIMMUN/CT
                E E47+ALL
L43        1631 S E2
                E AUTOIMMUN/CT
                E E8+ALL
L44       24179 S E3,E2+NT
L45           1 S L26 AND L41-L44
L46           1 S L34,L39,L40,L45
L47           2 S L26 AND ?HYPERPLAS?
L48           1 S L26 AND ?AUTOIMMUN?
L49           0 S L26 AND ?AUTO IMMUN?
L50           3 S L26 AND ?IMMUN?
L51           1 S L26 AND FAS
L52           0 S L26 AND CD95
L53           1 S L26 AND ?APOPTO?
L54           4 S L46-L48,L50,L51,L53
L55          67 S L26 AND (?NEOPLAS? OR ?TUMOR? OR ?TUMOUR? OR ?MALIGNAN? OR ?C
                E AUTOIMMUNE LYMPHOPROLIFERAT/CT
                E LYMPHOPROLIFERAT/CT
                E E6+ALL
L56       16195 S E5+NT
                E AUTOIMMUNE THYROID/CT
                E E4+ALL
L57        1153 S E2
                E HYPEREOSINOPHIL/CT
                E E4+ALL
                E E2+ALL
L58         783 S E3+NT
                E THYROID DISEASE/CT
                E E4+ALL
                E E2+ALL
L59       18741 S E4,E5,E3+NT
L60       27099 S E33+NT
L61       25405 S AUTOIMMUN?(L)(LYMPH? OR THYROID?) OR ?EOSINOPHIL?
L62           0 S L26 AND L56-L61
L63           3 S L54 AND L55
L64           4 S L54,L63

     FILE 'REGISTRY' ENTERED AT 09:13:42 ON 05 MAY 2003

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 09:14:17 ON 05 MAY 2003
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FILE COVERS 1907 - 5 May 2003 VOL 138 ISS 19
FILE LAST UPDATED: 4 May 2003 (20030504/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

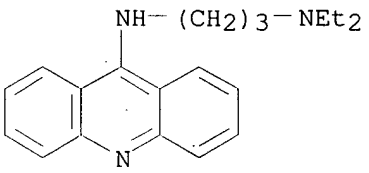
=> d l64 all hitstr tot

L64 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:716087 HCAPLUS
DN 137:232569
TI Preparation of acridinylpropanediaminess as stimulators of **Fas** -mediated **apoptosis**
IN **Villar, Hugo O.; Laborde, Edgardo**
PA **Telik, Inc., USA**
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-473
ICS A61P037-06
CC 27-18 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

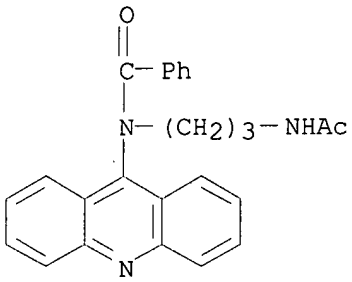
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002072096	A1	20020919	WO 2002-US7031	20020307 <--
	W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002169183	A1	20021114	US 2002-82801	20020222 <--
PRAI	US 2001-274535P	P	20010308 <--		

OS MARPAT 137:232569
AB R2R3N(CH2)3NR4R5 [R2 = (un)substituted 9-acridinyl; R3-R5 = H, alkyl, alkanoyl, aryl, etc.] were prepd. Thus, 9-chloroacridine was aminated by H2N(CH2)3NEt2 to give R2NH(CH2)3NEt2 (I; R2 = 9-acridinyl). Data for biol. activity of I were given.
ST acridinylpropanediamine prepn **Fas** mediated **apoptosis** stimulator; **autoimmune** disease acridinylpropanediamine prepn treatment; **hyperplasia** acridinylpropanediamine prepn treatment

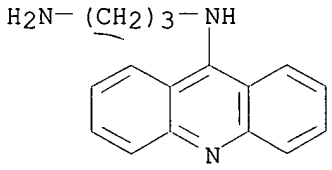
IT **Apoptosis**
Human
(prepn. of acridinylpropanediaminess as stimulators of **Fas** -mediated **apoptosis**)
IT **Fas antigen**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of acridinylpropanediaminess as stimulators of **Fas** -mediated **apoptosis**)
IT **Autoimmune disease**
Hyperplasia
(treatment; prepn. of acridinylpropanediaminess as stimulators of **Fas**-mediated **apoptosis**)
IT **55468-73-0P**, 9-[(3-Diethylaminopropyl)amino]acridine
459124-12-0P, 9-[(3-Acetylaminopropyl)(benzoyl)amino]acridine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of acridinylpropanediaminess as stimulators of **Fas** -mediated **apoptosis**)
IT 104-78-9, N,N-Diethyl-1,3-propanediamine 1207-69-8, 9-Chloroacridine
172422-05-8, 9-[(3-Aminopropyl)amino]acridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of acridinylpropanediaminess as stimulators of **Fas** -mediated **apoptosis**)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Chotkowska, E; ARCH IMMUNOL THER EXP 1972, V20(2), P289 HCAPLUS
(2) Piestrzeniewicz, M; ZEITSCHRIFT FUER NATURFORSCHUNG, C: BIOSCIENCES 1998, V53(5/6), P359 HCAPLUS
(3) Radzikowski, C; ARCH IMMUNOL THER EXP 1969, V17(1), P86 HCAPLUS
(4) Radzikowski, C; INT CONGR CHEMOTHER, PROC, 5TH 1967, V2(1), P263 HCAPLUS
(5) Univ Iowa Res Found; WO 0076982 A 2000 HCAPLUS
(6) Wysocka-Skrzela, B; POL J CHEM 1981, V55(7-8), P1735 HCAPLUS
IT **55468-73-0P**, 9-[(3-Diethylaminopropyl)amino]acridine
459124-12-0P, 9-[(3-Acetylaminopropyl)(benzoyl)amino]acridine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of acridinylpropanediaminess as stimulators of **Fas** -mediated **apoptosis**)
RN 55468-73-0 HCAPLUS
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-diethyl- (9CI) (CA INDEX NAME)



RN 459124-12-0 HCAPLUS
CN Benzamide, N-[3-(acetylamino)propyl]-N-9-acridinyl- (9CI) (CA INDEX NAME)



IT **172422-05-8**, 9-[(3-Aminopropyl)amino]acridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of acridinylpropanediaminess as stimulators of **Fas** -mediated **apoptosis**)
RN 172422-05-8 HCAPLUS
CN 1,3-Propanediamine, N-9-acridinyl- (9CI) (CA INDEX NAME)



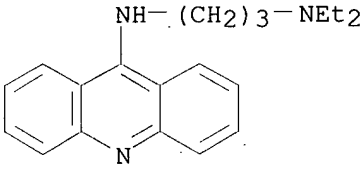
L64 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS
AN 1995:694359 HCAPLUS
DN 123:132316
TI **Immunomodulating** effect of acridine tautomers on eukaryotic cells
AU Petri, Ildiko B.; Berek, I.; Galy, Anne-Marie; Barbe, J.; Berek, Livia; Molnar, J.
CS Medical School, Albert Szent-Gyorgyi University, Szeged, H-6720, Hung.
SO Acta Microbiologica et Immunologica Hungarica (1995), 42(2), 203-8
CODEN: AMIHEF; ISSN: 1217-8950
PB Akademiai Kiado
DT Journal
LA English
CC 1-7 (Pharmacology)
AB The **immunomodulating** effect of some new amino- and imino-acridine derivs., were investigated on antibody dependent cellular **cytotoxicity** (ADCC) and induced-blast transformation of lymphocytes. In different concns. (2.0.times.10-6 M, 4.0.times.10-8 M and 2.0.times.10-5 M) the drugs produced a suppression of PHA- and ConA-induced cell **proliferative** response except in the case of 2b, 2d and 2g amino-acridines. The suppressive effects were dose dependent and exhibited a higher inhibitory level in the case of imino-acridines. Some drugs at low concn. exerted a little enhancing effect on ADCC reaction.
ST **Immunomodulator** acridine tautomer eukaryotic cell
IT Cell **proliferation**
Cytotoxic agents
Eukaryote
Immunomodulators
Lymphocyte
(**immunomodulating** effect of acridine tautomers on eukaryotic cells)
IT 260-94-6D, Acridine, tautomers 13365-36-1 **55468-73-0**

69530-83-2 74054-21-0 74054-22-1 80129-88-0 94129-62-1,
9-Ethylaminoacridine 110166-23-9 110166-24-0 111782-81-1
111782-82-2 111782-83-3 163589-29-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**immunomodulating** effect of acridine tautomers on eukaryotic cells)

IT 90-45-9, 9-Aminoacridine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(**immunomodulating** effect of acridine tautomers on eukaryotic cells)

IT **55468-73-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**immunomodulating** effect of acridine tautomers on eukaryotic cells)

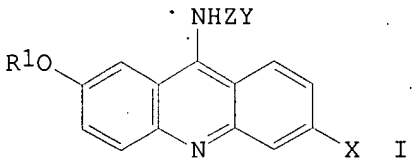
RN 55468-73-0 HCAPLUS
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-diethyl- (9CI) (CA INDEX NAME)



L64 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS
AN 1990:138923 HCAPLUS
DN 112:138923
TI Acridine derivatives, and human **immunodeficiency** virus (HIV) reverse transcriptase inhibitors and **antitumor** agents containing them
IN Takeuchi, Tomio; Umezawa, Kazuo; Hirose, Sonoko; Muraoka, Yasuhiko; Taketsuru, Hirofumi; Nogami, Takashi
PA Microbiochemical Research Foundation, Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C07D219-12
ICS A61K031-47; A61K031-495; A61K031-535
CC 27-18 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01221364	A2	19890904	JP 1988-2544	19880111
PRAI JP 1988-2544		19880111		

OS MARPAT 112:138923
GI



AB The title pharmaceutical contain I [R1 = alkyl; X = halo; Y = basic group; Z = alkylene, Z1NR2Z2(NR3Z3)n; R2, R3 = H, (amino-substituted)alkyl; Z1,Z2,Z3 = alkylene; n = 0,1] as active ingredients and I [R1 = alkyl; X = halo; Y = NH2, morpholine, NHCH:NH, NHC(:NH)NH2; Z = alkylene, Z1NR2Z2; when Z = alkylene, Y is other than NH2] are prepd. Treatment of 2-methoxy-6,9-dichloroacridine with [H2N(CH2)3]2NMe gave I [R1 = Me; X = Cl; YZ = H2N(CH2)3NMe(CH2)3]. The latter showed IC50 of 6.8 .mu.g/mL and 0.32 .mu.g/mL against HIV reverse transcriptase and mouse P388 leukemia cells, resp.

ST acridine HIV reverse transcriptase inhibitor; **antitumor** agents acridine prepn

IT **Neoplasm** inhibitors
(acridine derivs.)

IT **Immunodeficiency**
(acquired **immune** deficiency syndrome, treatment of, by acridine derivs.)

IT 86-38-4, 2-Methoxy-6,9-dichloroacridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(amination of, with bis(aminopropyl)methylamine)

IT 105-83-9, Bis(3-aminopropyl)methylamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(amination of, with methoxydichloroacridine)

IT 16694-46-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with aminoethylacridine)

IT 9068-38-6
RL: USES (Uses)
(inhibitors, acridine derivs. as)

IT 83-89-6P 7657-92-3P 14446-60-7P 35365-89-0P **55935-12-1P** 77420-96-3P **85363-11-7P** 85363-12-8P 121714-46-3P 121714-47-4P 121714-48-5P 121714-49-6P 121714-50-9P 121714-51-0P 121714-52-1P 121714-53-2P 121739-14-8P 125835-42-9P 125835-43-0P 125835-44-1P 125864-64-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as human **immunodeficiency** virus reverse transcriptase inhibitor and **antitumor** agent)

IT **55935-12-1P 85363-11-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as human **immunodeficiency** virus reverse transcriptase inhibitor and **antitumor** agent)

RN 55935-12-1 HCAPLUS

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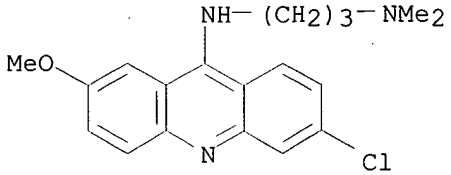
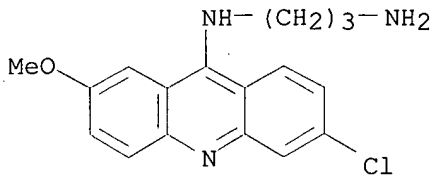
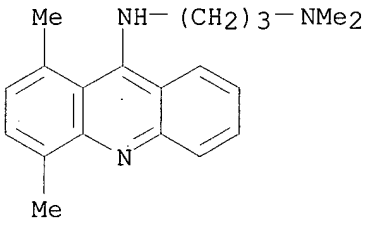


RN 85363-11-7 HCAPLUS
CN 1,3-Propanediamine, N-(6-chloro-2-methoxy-9-acridinyl)- (9CI) (CA INDEX NAME)



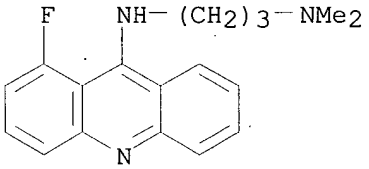
L64 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS
AN 1972:121776 HCAPLUS
DN 76:121776
TI Search for **antitumor** compounds. X. Biologic studies. **Antitumor** properties of 20 new substituted 9-aminoacridine derivatives. V
AU Hrabowska, Maria; Ledochowski, Andrzej; Horowska, Barbara; Konopa, Jerzy; Onoszko, Krystyna
CS Dep. Drug Technol. Biochem., Tech. Sch., Gdansk, Pol.
SO Archivum Immunologiae et Therapiae Experimentalis (1971), 19(6), 879-90
CODEN: AITEAT; ISSN: 0004-069X
DT Journal
LA English
CC 1 (Pharmacodynamics)
AB Of 20 substituted 9-aminoacridines (I) tested, 4-methyl-9-[[3-(dimethylamino)propyl]amino]-1-nitroacridine-2HCl [21193-46-4], 4-methyl-1-nitro-9-[(5-piperidinopentyl)amino]acridine-2HCl [34433-60-8] 4-methyl-9-[[2-(dimethylamino)ethyl]amino]-1-nitroacridine-2HCl [34433-61-9], and 4-methyl-1-nitro-9-(propylamino)acridine-2HCl [34433-62-0] had the highest in vitro **antitumor** activity. Some of the compds. inhibited **sarcoma** 180 in mice, but their **antitumor** effects could not be subsequently confirmed. Histol. examns. following treatment with 12 of the compds. indicated reticuloendothelial cell **hyperplasia** in the liver, spleen, and/or lymph nodes, feathery degeneration in the liver, in some cases liver damage, and karyorrhectic necrosis of the central portions of the **tumors**. Neither the size nor the electron attractivity of the substituent in position 1 of the acridine nucleus significantly affected **antitumor** properties.
ST aminoacridine **antitumor** effect; **tumor** aminoacridine
IT **Neoplasm** inhibitors
(aminoacridine derivs. as)
IT Molecular structure-biological activity relationship
(**neoplasm** inhibiting, of aminoacridine derivs.)
IT 10166-37-7 10166-38-8 10252-13-8 21193-46-4 **22670-65-1**
29232-83-5 34433-60-8 34433-61-9 34433-62-0 **35547-74-1**
35547-75-2 35547-76-3 35547-77-4
35547-78-5 35547-79-6 35547-80-9 35547-82-1
35604-83-2 35604-84-3 35853-27-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**neoplasm** inhibiting activity of)
IT **22670-65-1 35547-74-1 35547-75-2**
35547-76-3 35547-77-4 35547-78-5
35547-79-6 35604-83-2 35604-84-3
35853-27-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**neoplasm** inhibiting activity of)

RN 22670-65-1 HCAPLUS
CN 1,3-Propanediamine, N'-(1,4-dimethyl-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



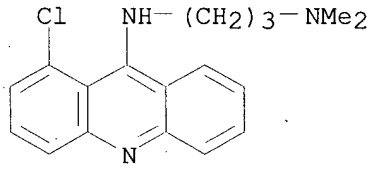
●2 HCl

RN 35547-74-1 HCAPLUS
CN 1,3-Propanediamine, N'-(1-fluoro-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



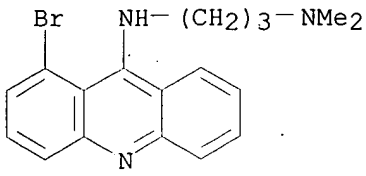
●2 HCl

RN 35547-75-2 HCAPLUS
CN 1,3-Propanediamine, N'-(1-chloro-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



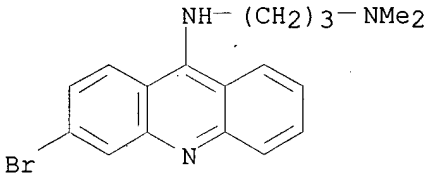
●2 HCl

RN 35547-76-3 HCAPLUS
CN 1,3-Propanediamine, N'-(1-bromo-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



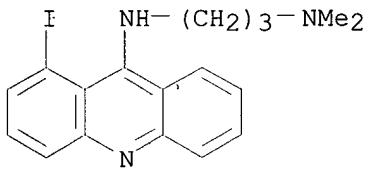
●2 HCl

RN 35547-77-4 HCAPLUS
CN 1,3-Propanediamine, N'-(3-bromo-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



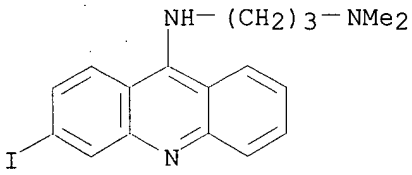
●2 HCl

RN 35547-78-5 HCAPLUS
CN 1,3-Propanediamine, N'-(1-iodo-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



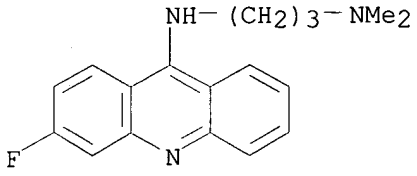
●2 HCl

RN 35547-79-6 HCAPLUS
CN 1,3-Propanediamine, N'-(3-iodo-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



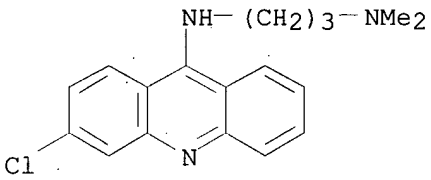
●2 HCl

RN 35604-83-2 HCAPLUS
CN 1,3-Propanediamine, N'-(3-fluoro-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



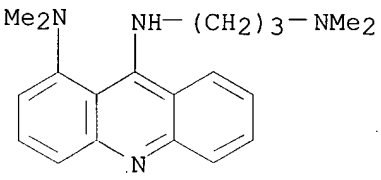
●2 HCl

RN 35604-84-3 HCAPLUS
CN 1,3-Propanediamine, N'-(3-chloro-9-acridinyl)-N,N-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 35853-27-1 HCAPLUS
CN 1,9-Acridinediamine, N9-[3-(dimethylamino)propyl]-N1,N1-dimethyl-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

=> d his

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L3 2001 S L1 FUL

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L4              STR L1
L5            1 S L4 CSS SAM SUB=L3
L6           13 S L4 CSS FUL SUB=L3
                SAV L6 KWON082A/A
L7            3 S L6 AND C20H25N3
L8         1794 S 2508.108.26/RID AND L3
L9            3 S L8 AND L6 NOT L7
L10           6 S L7,L9
L11             STR L1
L12           9 S L11 CSS SAM SUB=L8
L13         248 S L11 CSS FUL SUB=L8
                SAV L13 KWON082B/A
L14             STR L11
L15           8 S L14 CSS SAM SUB=L13
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L17         119 S L16 NOT L10

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                SEL AN
                EDIT /AN /OREF

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L21          18 S L20 NOT E18-E32
                SEL DN 11 18
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L25          97 S L17
L26         143 S L23,L25
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                E VILLAR H/AU
L27         111 S E3,E5,E12,E14
                E LABORDE E/AU
L28          48 S E3-E7
                E LA BORDE E/AU
                E US20020169183/PN
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                E US2001-274535/AP,PRN
L30           1 S E5
L31           1 S L26 AND L27-L30
                E TELIK/PA,CS
L32          35 S E3-E9
L33           1 S L26 AND L32
L34           1 S L31,L33
                E FAS/CT
                E E4+ALL
L35        5492 S E7,E6
                E E21+ALL
L36        3287 S E5,E4
                E E15+ALL
L37       49327 S E5,E4
                E E3+ALL
L38       55816 S E3-E7
L39           1 S L26 AND L35-L38
                E FAS/CW
L40           1 S E3 AND L26
                E HYPERPLAS/CT
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                 E E4+ALL
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                 E AUTOIMMUN/CT
                 E E47+ALL
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                 E E8+ALL
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L53            1 S L26 AND ?APOPTO?
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                 E AUTOIMMUNE LYMPHOPROLIFERAT/CT
                 E LYMPHOPROLIFERAT/CT
                 E E6+ALL
L56        16195 S E5+NT
                 E AUTOIMMUNE THYROID/CT
                 E E4+ALL
L57         1153 S E2
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                 E E2+ALL
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                 E THYROID DISEASE/CT
                 E E4+ALL
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L71            6 S L65-L70 AND L20-L64

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L71  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2003 ACS
AN   2000:900623  HCAPLUS
DN   134:56585
TI   Antagonism of immunostimulatory CpG-oligonucleotides by 4-aminoquinolines
     and other weak bases
IN   MacFarlane, Donald E.; Strekowski, Lucjan; Manzel, Lori; Ismail, Fyaz;
     Barlin, Gordon B.
PA   University of Iowa Research Foundation, USA
SO   PCT Int. Appl., 138 pp.
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CODEN: PIXXD2
DT Patent
LA English
IC ICM C07D215-44
ICS C07D219-12; A61K031-47; A61P037-06
CC 27-17 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 15
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000076982	A1	20001221	WO 2000-US16723	20000616 <--
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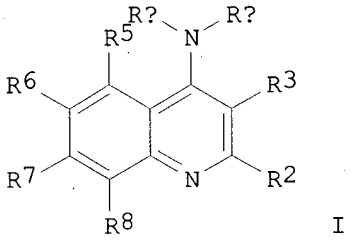
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6479504	B1	20021112	US 2000-595875	20000616

PRAI US 1999-139544P P 19990616
OS MARPAT 134:56585
GI



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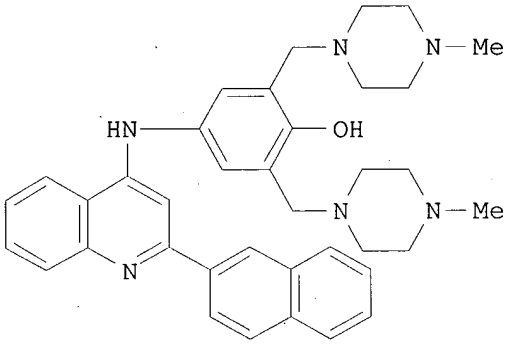

II

AB The present invention concerns compns. and methods for inhibiting stimulation of the immune system. The compds. and methods comprise compds. that are analogs and derivs. of chloroquine, such as 4-aminoquinolines, and other weak bases. other weak bases. More particularly, a method of inhibiting immunostimulation in a subject comprises administering an effective amt. of a compn. contg. substituted 4-quinolinamines [I; RA = H, lower alkyl; RB = (un)substituted alkyl, alkenyl, or alkynyl secondary or tertiary amine; R2 = (un)substituted Ph, naphthyl, anthracyl, phenanthryl, or styryl; R3 = R5 = R8 = H; R6, R7 = H, halo] and pharmaceutically acceptable salts thereof to said subject, the 4-quinolinamine compn. comprising a compd. having the structural formula A. They can be used in preventative and therapeutic treatments of autoimmune diseases and phenomena, transplant rejection such as host-vs.-graft disease and sepsis. A detailed structure-activity relationship (SAR) anal. of quinoline antagonists of immunostimulatory CpG-ODNs was undertaken. The synthesis work together with SAR anal. of the synthesized quinolines culminated in the finding of an extremely active agent (II).

ST structure activity relationship antagonist immune stimulation aminoquinoline; aminoquinoline prepn antagonist CpG oligonucleotide

immunostimulation; autoimmune disease treatment aminoquinoline; transplant rejection treatment aminoquinoline; host graft disease treatment aminoquinoline; sepsis treatment aminoquinoline

IT Oligonucleotides
Phosphorothioate oligonucleotides
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(CpG-contg.; prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT Transplant and Transplantation
(host-vs.-graft reaction; prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT Structure-activity relationship
(immunodepressant; antagonist activity of aminoquinolines against immunostimulation by CpG-oligonucleotides)

IT **Autoimmune disease**
Immunosuppressants
Sepsis
(prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT Transplant and Transplantation
(rejection of; prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT 54-05-7, Chloroquine 83-89-6 85-10-9 118-42-3 130-95-0, Quinine
2519-38-2 3548-09-2 3562-70-7 3870-43-7 5342-59-6 5418-60-0
5428-61-5 5431-04-9 5431-73-2 5437-27-4 5442-70-6 6286-25-5
6633-20-1 7597-07-1 15462-38-1 33601-73-9 34374-22-6 46980-74-9
47353-27-5 47579-52-2 47632-17-7 47653-53-2 64131-49-3
93338-11-5 95257-88-8 95257-89-9 95257-91-3 102466-48-8
105758-95-0 105758-96-1 110049-68-8 114159-05-6 119120-33-1
124959-65-5 127396-67-2 129224-99-3 129225-05-4 131407-83-5
131407-85-7 131435-43-3 133394-14-6 133671-46-2 133671-50-8
137434-38-9 144085-63-2 145431-57-8 145431-59-0 145431-61-4
145431-64-7 149428-26-2 150314-42-4 150314-43-5 153174-68-6
158583-64-3 159788-75-7 161804-72-4 161804-73-5 175415-01-7
175846-85-2 175846-87-4 175847-07-1 181775-92-8 181776-39-6
181776-44-3 183477-49-8 204511-84-2 204511-86-4 204511-90-0
204511-93-3 204512-05-0 204512-12-9 204512-20-9 204522-84-9
204522-85-0 204522-88-3 213972-22-6 241817-09-4 241817-11-8
241817-13-0 241817-21-0 241817-24-3 241817-33-4 241817-37-8
241817-39-0 241817-40-3 255824-68-1 313822-88-7 313825-03-5
313825-08-0 313825-18-2 313825-23-9 313825-28-4 313825-33-1
313825-43-3 313825-48-8 313825-53-5 313825-62-6 313825-75-1
313825-84-2 313825-92-2 313826-09-4 313826-14-1 313826-20-9
313826-32-3 313826-37-8 313826-47-0 313826-52-7 313826-57-2
313826-66-3 313826-72-1 313826-84-5 313826-89-0 313826-94-7
313827-17-7 313827-20-2 313827-25-7 313827-34-8 313827-39-3
313827-52-0 313827-57-5 313827-62-2 313827-71-3 313827-81-5
313827-86-0 313828-11-4 313828-20-5 313828-29-4 313828-34-1
313828-46-5 313828-70-5 313828-95-4 313829-00-4 313829-12-8
313829-46-8 313829-63-9 313829-76-4 313829-81-1 313829-89-9
313830-14-7 313830-23-8 313830-28-3 313830-34-1 313830-42-1
313830-60-3 313830-65-8 313830-78-3 313830-83-0 313830-88-5
313830-96-5 313831-01-5 313831-42-4 313831-51-5 313831-68-4
313831-77-5 313831-82-2 313831-93-5 313831-97-9 313832-02-9

313832-07-4 313832-12-1 313832-21-2 313832-26-7 313832-31-4
313832-35-8 313832-48-3 313832-53-0 313832-58-5 313832-66-5
313832-71-2 313832-76-7 313832-84-7 313832-89-2 313832-94-9
313832-99-4 313833-03-3 313833-08-8 313833-13-5 313833-18-0
313833-23-7 313944-28-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT 145363-45-7P 313823-42-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT 241817-26-5P 241817-27-6P 241817-28-7P 241817-34-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT 129224-83-5P 131407-77-7P 181776-11-4P 183477-55-6P 183477-56-7P
194919-92-1P 241817-15-2P 241817-25-4P 241817-29-8P 241817-30-1P
241817-31-2P 241817-38-9P 255824-70-5P 255824-71-6P 255824-72-7P
313821-23-7P 313821-28-2P 313821-33-9P 313821-66-8P 313821-71-5P
313821-76-0P 313822-10-5P 313822-15-0P 313822-20-7P 313822-26-3P
313822-97-8P 313823-32-4P 313823-37-9P 313823-47-1P 313823-80-2P
313823-84-6P 313823-97-1P 313824-02-1P 313824-07-6P 313824-15-6P
313824-20-3P 313824-77-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT 50-00-0, Formaldehyde, reactions 88-17-5, 2-Trifluoromethylaniline 105-83-9, N,N-Bis(3-aminopropyl)methylamine 108-30-5, Succinic anhydride, reactions 109-01-3, N-Methylpiperazine 109-55-7, N,N-Dimethyl-1,3-propanediamine 109-76-2, 1,3-Propanediamine 110-15-6, Succinic acid, reactions 123-00-2, 3-Morpholinopropylamine 123-30-8, 4-Hydroxyaniline 156-87-6, 3-Aminopropanol 403-42-9, 4'-Fluoroacetophenone 445-27-2, 2'-Fluoroacetophenone 3731-51-9, 2-(Aminomethyl)pyridine 7209-38-3, 1,4-Bis(3-aminopropyl)piperazine 103914-51-8 105563-31-3 132608-39-0, Lithium 2-(dimethylamino)ethylamide 156094-81-4 313821-86-2 313821-91-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

IT 103914-43-8P 110802-10-3P 133671-30-4P 147217-99-0P 147218-06-2P
147218-08-4P 158117-37-4P 194919-88-5P 194919-89-6P 194919-90-9P
194919-91-0P 313821-81-7P 313821-96-4P 313822-00-3P 313822-05-8P
313822-47-8P 313822-60-5P 313822-65-0P 313822-70-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of aminoquinolines as antagonists for immunostimulatory CpG-oligonucleotides for presentation and therapeutic treatment of autoimmune diseases and transplant rejection such as host-vs.-graft disease and sepsis)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Eisai Co Ltd; EP 0607439 A 1994 HCAPLUS
(3) F Hoffmann-La Roche Ag; WO 9535287 A 1995 HCAPLUS
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(7) Strekowski, L; BIOORGANIC & MEDICINAL CHEMISTRY LETTERS 1999, V9(13), P1819 HCAPLUS
(8) Strekowski, L; JOURNAL OF MEDICINAL CHEMISTRY 1996, V39, P3980 HCAPLUS

L71 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2003 ACS

AN 1998:436155 HCAPLUS
DN 129:170225

TI Inhibition of RNA synthesis in vitro by acridines. Relation between structure and activity

AU **Piestrzeniewicz, Mariola K.**; Wilmanska, Dorota; Studzian, Kazimierz; Szemraj, Janusz; Czyz, Malgorzata; Denny, William A.; Gniazdowski, Marek

CS Department General Chemistry, Institute Physiology Biochemistry, Medical University Lodz, Lodz, 90131, Pol.

SO Zeitschrift fuer Naturforschung, C: Biosciences (**1998**), **53**(5/6), **359**-368
CODEN: ZNCBDA; ISSN: 0341-0382

PB Verlag der Zeitschrift fuer Naturforschung

DT Journal

LA English

CC 1-6 (Pharmacology)
Section cross-reference(s): 6

AB The effects of acridine derivs. (proflavine and 2,7-dialkyl derivs., diacridines and triacridines, 9-aminoacridine carboxamides, and 9-anilinoacridine, amsacrine and its congeners) on overall RNA synthesis in vitro, on synthesis of initiating oligonucleotides and the binding of the enzyme to DNA were studied. The primary mechanism of action is related to inhibition of the enzyme binding to DNA. The acridines (intercalating or non-intercalating and bis-intercalating ligands) assayed here differ in the properties of their complexes with DNA. Correlation is generally obsd. between inhibition of RNA synthesis in vitro and **cytotoxicity** in cell cultures for di- and triacridines and 9-aminoacridine carboxamide derivs. No relationship was found between the effect on RNA polymerase system and biol. effects for amsacrine and its derivs. in contrast to the other series of acridines studied here. The aniline ring seems to decrease the inhibitory potency of a ligand. The discrepancy between the biol. effect and RNA synthesis inhibition may be due to a different mechanism of **cytotoxicity** action of amsacrine which is a potent topoisomerase II poison.

ST RNA synthesis inhibition acridine **anticancer**

IT Structure-activity relationship
(DNA-binding; inhibition of RNA synthesis in vitro by acridines and relation between structure and activity)

IT Structure-activity relationship
(enzyme-inhibiting; inhibition of RNA synthesis in vitro by acridines and relation between structure and activity)

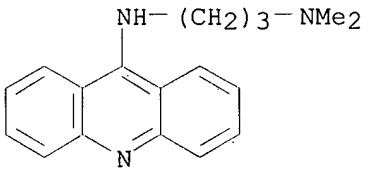
IT **Antitumor** agents
RNA formation
(inhibition of RNA synthesis in vitro by acridines and relation between structure and activity)

IT 92-26-2, 2,7-Dimethylproflavine 92-62-6, Proflavine 260-94-6D,

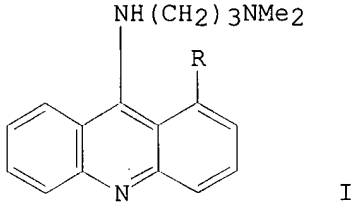
Acridine, derivs. **13365-37-2**, 9-[3-(Dimethylamino)propylamino]ac
ridine 33244-11-0, 3,6-Acridinediamine, 2,7-bis(1,1-dimethylethyl)-
51264-14-3, Amsacrine 51264-17-6, Methanesulfonamide,
N-[4-(9-acridinylamino)-2-methoxyphenyl]- 83951-93-3,
2,7-Diethylproflavine 83951-94-4, 2,7-Diisopropylproflavine 88476-68-0
89459-25-6 89459-30-3 89459-43-8 91482-26-7 91549-70-1
98502-80-8 98502-84-2 98502-89-7 98512-16-4 100113-16-4
100113-19-7 100113-21-1 100113-24-4 106626-64-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition of RNA synthesis in vitro by acridines, relation between structure and activity)

IT **13365-37-2**, 9-[3-(Dimethylamino)propylamino]acridine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition of RNA synthesis in vitro by acridines, relation between structure and activity)

RN 13365-37-2 HCAPLUS
CN 1,3-Propanediamine, N'-9-acridinyl-N,N-dimethyl- (9CI) (CA INDEX NAME)



L71 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN 1983:522253 HCAPLUS
DN 99:122253
TI Research on **tumor** inhibiting compounds. Part LXXIII. Reduction of 1-nitro-9-[3-(dimethylamino)propylamino]acridine by sodium borohydride
AU **Wysocka-Skrzela, Barbara**; Ledochowski, Andrzej
CS Inst. Org. Food Chem. Technol., Polytech. Univ., Gdansk, 80952, Pol.
SO Polish Journal of Chemistry (**1981**), **55**(7-8), **1735**-6
CODEN: PJCHDQ; ISSN: 0137-5083
DT Journal
LA English
CC 27-18 (Heterocyclic Compounds (One Hetero Atom))
GI

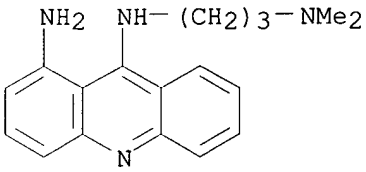


I

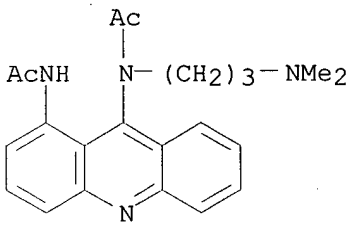
AB Redn. of Ledakrin (I.2HCl, R = NO2) (II) with NaBH4 gave 18% I (R = NO), 28% I (R = NHOH) (III), and 24% I (R = NH2). Compd. III was identical with the compd. formed during incubation of II with **tumor** cells.

ST Ledakrin sodium borohydride redn; nitroacridine dimethylaminopropylamine sodium borohydride redn

IT **19395-54-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and acetylation of)
IT 30904-48-4P 87061-34-5P 87061-35-6P **87061-36-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT 16940-66-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(redn. by, of Ledakrin)
IT 6514-85-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(redn. of, with sodium borohydride)
IT **19395-54-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and acetylation of)
RN 19395-54-1 HCAPLUS
CN 1,9-Acridinediamine, N9-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)



IT **87061-36-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 87061-36-7 HCAPLUS
CN Acetamide, N-[1-(acetylamino)-9-acridinyl]-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)



L71 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN 1972:457010 HCAPLUS
DN 77:57010
TI **Cytotoxic** properties of nitro derivatives of 9-aminoacridine in cultures of Euglena gracilis
AU **Chotkowska, Ewa**; Konopa, Jerzy
CS Dep. Drug. Technol. Biochem., Tech. Univ., Gdansk, Pol.
SO Archivum Immunologiae et Therapiae Experimentalis (**1972**), **20**(2), **289**-94
CODEN: AITEAT; ISSN: 0004-069X
DT Journal
LA English
CC 3-2 (Biochemical Interactions)
AB Among 30 9-aminoacridine derivs. tested against E. gracilis, 9-[[2-(diethylamino)ethyl]amino]-1-nitroacridine (I) [24414-70-8] and

9-[[3-(dimethylamino)propyl]amino]-1-nitroacridine (II) [4533-39-5] were the most active, causing 50% inhibition of growth of the protozoa at 1-10 and 10 .mu.g/ml, resp. 9-[[2-(Dimethylamino)ethyl]amino]-1-nitroacridine [15539-41-0], 9-[[3-(dimethylamino)propyl]amino]-4-methyl-1-nitroacridine [24400-01-9], 3-bromo-9-[[3-(dimethylamino)propyl]amino]-5-methylacridine **[35411-41-7]**, and 3-bromo-9-[[3-(dimethylamino)propyl]amino]-6-nitroacridine [24402-94-6] caused 50% inhibition at .leq. 25 .mu.g/ml. Six other derivs. had the same effect at .leq. 50 .mu.g/ml. With the exception of the 2 bromo derivs., the most active compds. had the nitro group in position one. All other 2-, 3-, and 4-nitro derivs. failed to inhibit Euglena growth at <200 .mu.g/ml. Inhibitory activity against Euglena correlated well with previously reported biol. activity of the compds. in tissue cultures.

ST aminoacridine Euglena inhibition; **antitumor** test Euglena; acridine aminonitro Euglena

IT Protozoacides
(aminoacridine derivs. as)

IT Euglena gracilis
(aminoacridine derivs. inhibition of)

IT Molecular structure-biological activity relationship
(protozoacidal, of aminoacridine derivs.)

IT 6691-68-5 22044-87-7 37551-11-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(protazoacidal activity of)

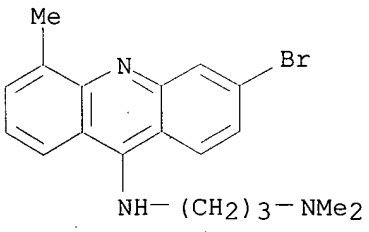
IT 4292-63-1 6237-22-5 6237-29-2 15539-41-0 15539-43-2 15539-45-4 20064-09-9 22157-47-7 22157-48-8 24399-89-1 24399-91-5 24399-97-1 24399-98-2 24400-01-9 24400-02-0 24402-94-6 24414-70-8 31638-11-6 32987-50-1 **35411-41-7** 37551-28-3 37551-32-9 37551-36-3 37754-14-6 37837-07-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(protozoacidal activity of)

IT 4533-39-5
RL: PRP (Properties)
(protozoacidal activity of)

IT **35411-41-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(protozoacidal activity of)

RN 35411-41-7 HCAPLUS

CN 1,3-Propanediamine, N'-(3-bromo-5-methyl-9-acridinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



L71 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2003 ACS

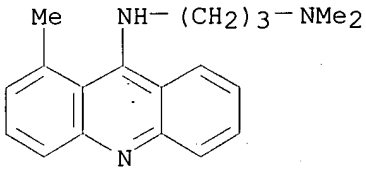
AN 1969:95102 HCAPLUS

DN 70:95102

TI Search for **antitumor** compounds. V. Biologic studies. **Antitumor** properties of 41 new acridine derivatives

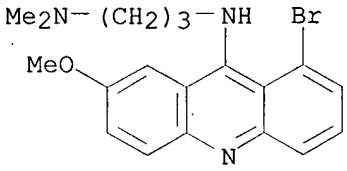
AU **Radzikowski, Czeslaw**; Ledochowski, Andrzej; Hrabowska, Maria; Horowska, Barbara; Stefanska, Barbara; Kdnopa, Jerzy; Jereczek-Morawska,

Elzbieta
CS Polska Akad. Nauk, Gdansk, Pol.
SO Archivum Immunologiae et Therapiae Experimentalis (**1969**), **17**(1), **86**-98
CODEN: AITEAT; ISSN: 0004-069X
DT Journal
LA English
CC 15 (Pharmacodynamics)
AB Methoxy- and methyl-9-aminoacridine derivs. were examd. for their **antitumor** activity in 3 screening tests: **sarcoma** 180 in mice, Miyamura test, and inhibition of germination of Lepidium sativum (R., et al., 1967). **Sarcoma** 180 was inhibited most often by compds. which: contained dimethyl-aminoethylamine, dimethylaminopropylamine, or dimethyl-aminobutylamine as substituents at C-9; contained a Me or methoxy group in position 4. In the Miyamura test, activity was observed with those compds. which: contained dimethyl-aminoethylamine as substituent at C-9; contained a methoxy or Me group in position 3. Germination of L. sativum was inhibited by compds. which: contained as substituent at C-9 a N,N-dimethylhydrazine, dimethylaminopropylamine, or dimethyl-aminoethylamine; this effect was observed most often when the methoxy or Me group was in position 4. Among the 9-aminoacridine derivs., 6 compds. showed activity in 2 tests including 9-(dimethylaminopropylamino)-4-methoxyacridine and 9-(di-methylaminopropylamino)-2-methylacridine, and 19 compds. in only 1 of the tests.
ST **antitumor** aminoacridine derivs; aminoacridine derivs **antitumor**; **sarcoma** control acridine derivs; acridine derivs **sarcoma** control
IT **Neoplasm** inhibitors
(acridine derivs.)
IT Molecular structure-biological activity relationships
(**neoplasm** inhibiting, of acridine derivs.)
IT 1442-91-7 23159-15-1 23262-27-3 23541-67-5 23541-68-6 23541-69-7
23541-70-0 23541-71-1 **23551-95-3** 23551-96-4
23551-97-5 23551-98-6 23551-99-7 23552-00-3 **23552-01-4**
23552-02-5 23552-03-6 **23552-04-7** 23552-05-8
23552-06-9 23552-07-0 23552-08-1 23552-09-2 23552-10-5
23552-11-6 23552-12-7 23552-13-8 23552-14-9 **23552-15-0**
23552-16-1 23552-17-2 23552-18-3 23552-19-4 **23552-20-7**
23552-21-8 23552-22-9 23552-23-0 23552-24-1 23552-25-2
23552-26-3 **23552-28-5** **23552-29-6** 23595-24-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**neoplasm** inhibition by)
IT **23541-70-0** **23551-95-3** **23552-01-4**
23552-04-7 **23552-06-9** **23552-15-0**
23552-20-7 **23552-28-5** **23552-29-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**neoplasm** inhibition by)
RN 23541-70-0 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



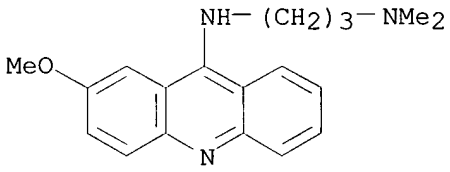
●2 HCl

RN 23551-95-3 HCAPLUS
CN Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride (6CI, 7CI, 8CI) (CA INDEX NAME)



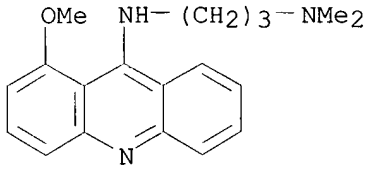
●2 HCl

RN 23552-01-4 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



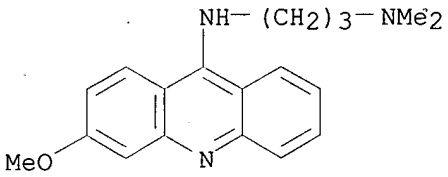
●2 HCl

RN 23552-04-7 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



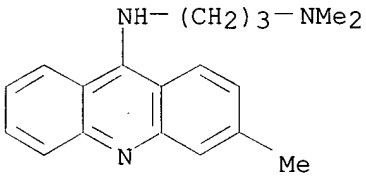
●2 HCl

RN 23552-06-9 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



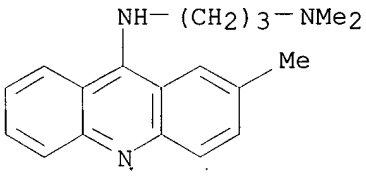
●2 HCl

RN 23552-15-0 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methyl-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



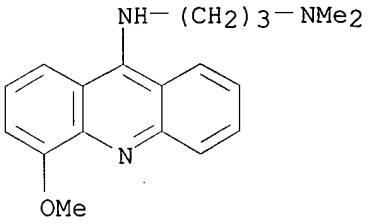
●2 HCl

RN 23552-20-7 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methyl-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



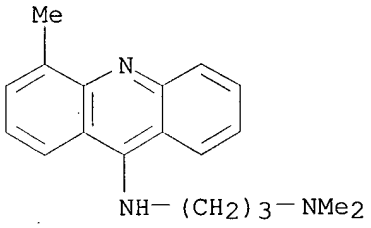
●2 HCl

RN 23552-28-5 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

RN 23552-29-6 HCAPLUS
CN 1,3-Propanediamine, N,N-dimethyl-N'-(4-methyl-9-acridinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

L71 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2003 ACS
AN 1969:2023 HCAPLUS
DN 70:2023
TI Cytostatic and **cytotoxic** effect of 1-nitro-9-aminoacridine derivatives
AU **Radzikowski, C.**; Ledochowski, A.
CS Polska Akad. Nauk, Gdansk, Pol.
SO Int. Congr. Chemother., Proc., 5th (**1967**), Volume **2**, Issue 1, **263**-6. Editor(s): Spitzy, K. H. Publisher: Verlag Wiener Medizinisch. Akad., Vienna, Austria.
CODEN: 20JJA4
DT Conference
LA English
CC 15 (Pharmacodynamics)
AB Sixty-nine derivs. of 9-aminoacridine were studied as potential **antitumor** agents. The nitro substituted compds. were biol. more active than related methoxy, methyl, or dimethylamino derivs., when tested on four **tumor** screens.
ST aminoacridines **cancer**; **cancer** aminoacridines; nitroaminoacridines **cancer**
IT **Neoplasm** inhibitors
(acridine derivs. as)
IT Molecular structure-biological activity relationships
(**neoplasm** inhibiting, of acridine derivs.)
IT Acridine, 9-[[2-(dimethylamino)ethyl]amino]-3-methoxy-
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**neoplasm** inhibition by)

IT **3323-61-3 3324-09-2** 3505-65-5 4292-62-0 4292-63-1
4292-64-2 4533-37-3 **4533-38-4** 4533-39-5 4552-23-2
4595-85-1 6237-22-5 6237-24-7 6237-29-2 6237-32-7 6237-34-9
6514-65-4 6514-86-9 6691-68-5 10496-95-4 13240-58-9 15016-02-1
15016-07-6 15463-22-6 15463-23-7 15463-25-9 15539-39-6
15539-41-0 15539-43-2 15539-45-4 **20566-27-2** 22044-86-6
22044-87-7 **22044-88-8 22044-89-9 22044-90-2**
22044-91-3 22044-92-4 22089-28-7 22089-29-8 22089-30-1
22089-31-2 22089-33-4 22089-34-5 22089-35-6 22089-36-7
22089-37-8 22089-39-0 22089-40-3 22089-41-4 22089-42-5
22089-43-6 **22089-44-7 22089-45-8 22089-47-0**
22089-48-1 22089-49-2 22089-50-5 22089-52-7 22089-53-8
22129-21-1 22129-22-2 22148-42-1 22148-43-2 22157-47-7
22157-48-8 22584-79-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**neoplasm** inhibition by)

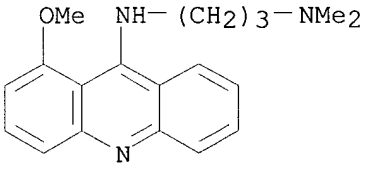
IT 22089-32-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**neoplasm** inhibition by, mol. structure in relation to)

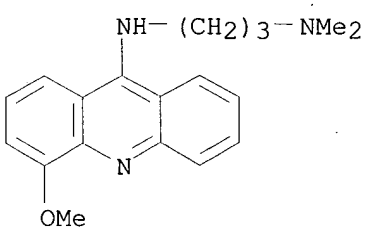
IT **3323-61-3 3324-09-2 4533-38-4**
20566-27-2 22044-88-8 22044-89-9
22044-90-2 22089-44-7 22089-45-8
22089-47-0 22089-48-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**neoplasm** inhibition by)

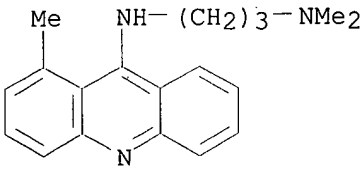
RN 3323-61-3 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy- (7CI, 8CI) (CA INDEX NAME)



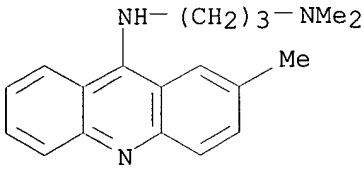
RN 3324-09-2 HCAPLUS
CN 1,3-Propanediamine, N'-(4-methoxy-9-acridinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



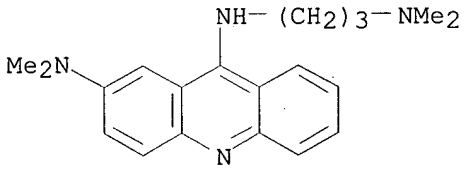
RN 4533-38-4 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl- (7CI, 8CI) (CA INDEX NAME)



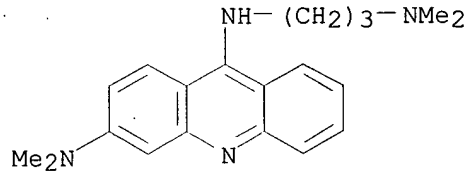
RN 20566-27-2 HCAPLUS
CN 1,3-Propanediamine, N,N-dimethyl-N'-(2-methyl-9-acridinyl)- (9CI) (CA INDEX NAME)



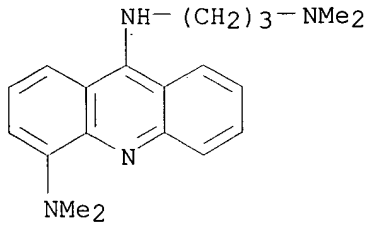
RN 22044-88-8 HCAPLUS
CN Acridine, 2-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]- (8CI) (CA INDEX NAME)



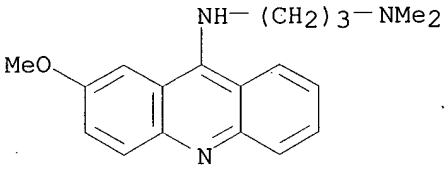
RN 22044-89-9 HCAPLUS
CN Acridine, 3-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]- (8CI) (CA INDEX NAME)



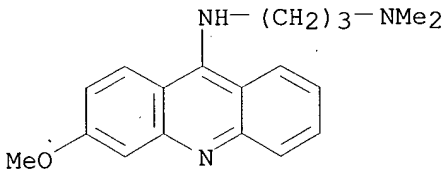
RN 22044-90-2 HCAPLUS
CN Acridine, 4-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]- (8CI) (CA INDEX NAME)



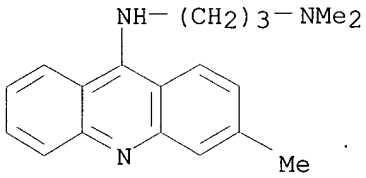
RN 22089-44-7 HCAPLUS
CN 1,3-Propanediamine, N'-(2-methoxy-9-acridinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



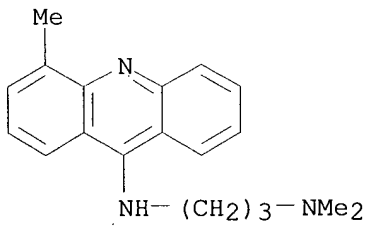
RN 22089-45-8 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methoxy- (8CI) (CA INDEX NAME)



RN 22089-47-0 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methyl- (8CI) (CA INDEX NAME)



RN 22089-48-1 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methyl- (8CI) (CA INDEX NAME)



=> d all hitstr tot

L73 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1966:429389 HCAPLUS
DN 65:29389
OREF 65:**5440a-d**

TI Tumor-inhibiting compounds. XXXI. Synthesis of 2-chloro-and 2-bromo-9-(4-dimethylaminobutylamino)acridine and of some methoxybromo derivatives of 9-(3-dimethylaminopropylamino)acridine

AU Bogucka, Maria; Ledochowski, Zygmunt
CS Politech., Gdansk, Pol.

SO Roczniki Chemii (1966), 40(4), 677-82
CODEN: ROCHAC; ISSN: 0035-7677
DT Journal
LA Polish
CC 37 (Heterocyclic Compounds (One Hetero Atom))

GI For diagram(s), see printed CA Issue.

AB cf. preceding abstr. N-(4-Chlorophenyl)anthranilic acid (52.8 g.) was heated for 5.5 hrs. with 306.6 g. POCl3 at 85-130.degree.. The excess of POCl3 was distd. and the residue poured into ice-concd. NH3 mixt. and extd. with CHCl3. From the ext., 26.3 g. 2,9-dichloroacridine, m. 145-6.degree., was obtained in 50% yield. 2-Bromo-9-chloroacridine was prepd. similarly and with the same yield. To 1.6 g. 3-bromo-5-methoxy-9-chloro-acridine was added 2.5 g. phenol and 0.75 ml. N,N-dimethylaminopropylamine. The mixt. was heated on a steam bath 1.5 hrs. and cooled, 20 ml. ether added, and the whole ext. with 50 ml. 2.5N aq. KOH. The ether ext. was dried with MgSO4, then an ether soln. of HCl added. The ppt. formed was recrystd. thrice from abs. EtOH to yield 2 g. product. Similarly were obtained the following I (R, X, n, % yield, and m.p. (decompn.) given): 5-OMe, 3-Br, 3, 61,226-7.degree.; 6-OMe, 3-Br, 3, 87,237-8.degree.; 8-Me, 3-Br, 3, 70, 194-5.degree.; 7-OMe, 2-Br, 3, 74,248-9.degree.; 7-OMe, 4-Br, 3, 48, 237-8.degree.; H, 2-Cl, 4, 80, 253-4.degree.; H, 2-Br, 4, 82, 252-3.degree.. The antitumor properties of these compds. were tested on Sa 180 in mice, in vitro in the Miyamura test, and on germs of Lepidium sativum. All the tumor-active compds. have the halogen atom in the position 1 or 3.

IT Neoplasms
Neoplasms
(inhibitors of)

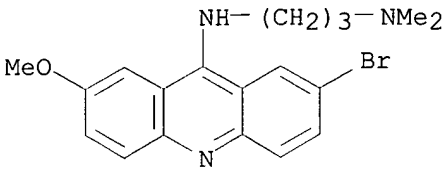
IT Acridine, 3-bromo-9-L[3-(dimethylamino)propyl]amino]-6-methoxy-, dihydrochloride

IT 611-64-3, Acridine, 9-methyl-
(derivs.)

IT 1019-14-3, Acridine, 2,9-dichloro- 6534-56-1, Acridine, 3-bromo-9-chloro-5-methoxy- 6534-57-2, Acridine, 3-bromo-9-chloro-6-methoxy- 6534-58-3, Acridine, 6-bromo-9-chloro-1-methoxy- 6534-59-4, Acridine, 2-bromo-9-chloro-7-methoxy- 6534-60-7, Acridine, 5-bromo-9-chloro-2-methoxy- 6534-61-8, Acridine, 3-bromo-9-[[4-(dimethylamino)butyl]amino]-6-methoxy-, dihydrochloride 6534-62-9, Acridine, 6-bromo-9-[[4-(dimethylamino)butyl]amino]-1-methoxy-, dihydrochloride **6534-84-5**, Acridine, 2-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride **6534-85-6**, Acridine, 5-bromo-9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride 6534-86-7, Acridine, 2-chloro-9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride 6534-87-8, Acridine, 2-bromo-9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride 6534-95-8, Acridine, 2-chloro-9-[[4-(dimethylamino)butyl]amino]- 6534-96-9, Acridine, 2-bromo-9-[[4-(dimethylamino)butyl]amino]- **6546-58-3**, Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]amino]-1-methoxy-, dihydrochloride **6832-64-0**, Acridine, 3-bromo-9-[[3-(dimethylamino)propyl]amino]-5-methoxy-, dihydrochloride
(prepn. of)

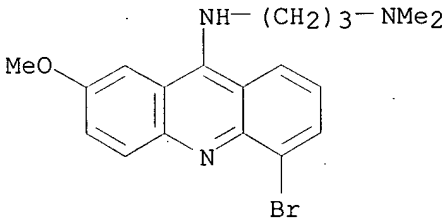
IT **6534-84-5**, Acridine, 2-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride **6534-85-6**, Acridine, 5-bromo-9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride **6546-58-3**, Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]amino]-1-methoxy-, dihydrochloride **6832-64-0**, Acridine, 3-bromo-9-[[3-(dimethylamino)propyl]amino]-5-methoxy-, dihydrochloride
(prepn. of)

RN 6534-84-5 HCAPLUS
CN Acridine, 2-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



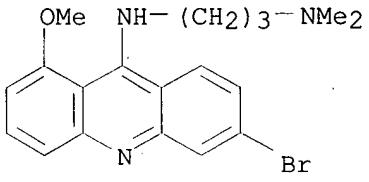
●2 HCl

RN 6534-85-6 HCAPLUS
CN Acridine, 5-bromo-9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



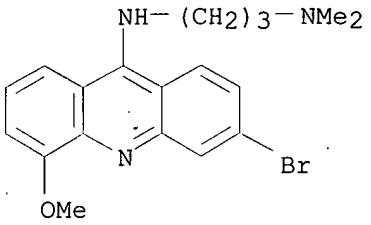
●2 HCl

RN 6546-58-3 HCAPLUS
CN Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]amino]-1-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

RN 6832-64-0 HCAPLUS
CN Acridine, 3-bromo-9-[[3-(dimethylamino)propyl]amino]-5-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

L73 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1965:488781 HCAPLUS
DN 63:88781
OREF 63:**16302h,16303a-e**
TI Tumor-inhibiting compounds. XXV. Synthesis of some N9-derivatives of 2-, 3-, and 4-dimethylamino-9-aminoacridines
AU Ledochowski, Andrzej; Kozinska, Barbara
CS Politech., Gdansk, Pol.
SO Roczniki Chem. (1965), 39(3), 357-63
DT Journal
LA Polish
CC 37 (Heterocyclic Compounds (One Hetero Atom))
GI For diagram(s), see printed CA Issue.
AB cf. CA 63, 4256b. Ullmann condensation of dimethylamino-2-chlorobenzoic acids with PhNH2 or 2-chlorobenzoic acid with the corresponding dimethylaminoaniline led to N-(dimethylaminophenyl) anthranilic acids (I), which when cyclized by heating with POCl3 afforded 2-, 3-, and 4-(dimethylamino)-9-chloroacridines (II, R = Cl, R1 = NMe2) (III). Condensation of III with diamines gave the title compds. All of them were inactive in Myjamura test for antitumor activity on Ehrlich ascites cancer cells and for anti-mitotic action on germs of Lepidium sativum. Thus, 10 g. 2,4-Cl(H2N)C6H3COOH (IV) in 50 ml. 20% Na2CO3 treated at 20.degree. with 6 ml. Me2SO4, stirred 0.5 hr., and heated 1 hr. on a water bath gave 1.1 g. 2,4-Cl(MeNH)C6H3COOH, m. 176-7.degree., and 1.5 g. 2,4-Cl(Me2N)C6H3COOH (V), m. 211-12.degree.. V was also prepd. in 30% yield from 5 g. IV, 7.2 ml. MeI, and 8.1 g. KOH in 15 ml. MeOH, when refluxed 3 hrs. with subsequent addn. of 1.8 ml. MeI and 2 g. KOH during 1-hr. intervals. A mixt. of 0.5 g. V, 0.5 g. PhNH2, 0.4 g. K2CO3, and catalytic amt. of Cu(OAc)2 in 5 ml. iso-AmOH refluxed 1 hr., gave 0.3 g. I (R = NMe2, R1 = H), (VI), m. 171-2.degree. (alc.). A mixt. of 10 g. o-ClC6H4COOH, 9 g. freshly distd. o-Me2NC6H4NH2, 9 g. anhyd. KCO3, 0.01 g. freshly-pptd. Cu, and 70 ml. cyclohexanol heated 5 hrs. at 160.degree. afforded 12.3 g. I, (R = H, R1 = 2-NMe2) (VII), m. 198-200.degree. (C6H6). Similarly prepd. were the following I (R, R1, m.p., and % yield given): H, 4-NMe2, 212-14.degree., 35; H, 3-NMe2, 154.degree., 40. VII (10 g.) in 70 ml. POCl3 heated 3 hrs. at 130-40.degree., cooled, and poured onto crushed ice with ammonia gave 7.5 g. III (R1 = 4-NMe2)(VIII), m. 116-18.degree. (cyclohexane). The following III were prepd. (R1, m.p., and % yield given): 1-NMe2, 157-8.degree., 75; 3-NMe2 (IX), 118-19.degree., 30. Similarly, VI heated 0.5 hr. yielded 60% IX. VIII (1.8 g.) and 10 g. PhOH was heated 0.5 hr. on a water bath, cooled, treated with 1.04 ml. Me2N(CH2)3NH2, and heated again for 1.5 hrs. to give 2.8 g. II.3HCl[R = NH(CH2)3-NMe2, R1 = 4-NMe2], m. 150.degree. (decompn.). Similarly the fol-lowing II were prepd. (R,R1, salt, m.p., and % yield given): NH(CH2)3NMe, 2-NMe2, 3HCl, 225-6.degree., 70; NH(CH2)3NMe2, 3-NMe2, 3HCl, 255-6.degree., 80; NH(CH2)4NMe2, 2-NMe2, 3HCl.-H2O, 207-9.degree., 71; NH(CH2)4NMe2, 3-NMe2, 3HCl, 220-1.degree., 82; NH(CH2)4NMe2, 4-NMe2,

3HCl.0.5H2O, 185-7.degree., 60; NHCH-Me(CH2)3NMe2, 2-NMe2, 3C6H3N3O7, 160-2.degree., 70; NHCHMe-(CH2)3NMe2, 3-NMe2, 3HCl, 197-9.degree., 80; NHCHMe(CH2)3-NMe2, 4-NMe2, 3HCl, 168-9.degree., 72.

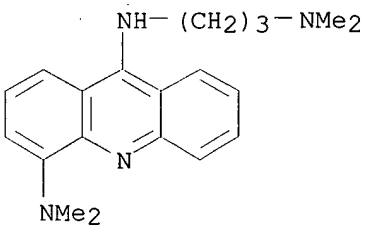
IT Benzoic acid, 2-anillno-4-(dilmethylamino)-

IT 3975-58-4, 3-Azabicyclo[3.2.1]octane, 3-amino-1,8,8-trimethyl- 3975-59-5, Acridine, 9-chloro-2-(dimethylamino)- 3975-60-8, Acridine, 9-chloro-3-(dimethylamino)- 3975-61-9, Acridine, 9-chloro-4-(dimethylamino)- 3975-62-0, Benzoic acid, 2-chloro-4-(methylamino)- 3975-63-1, Benzoic acid, 2-chloro-4-(dimethylamino)- 3975-65-3, Anthranilic acid, N-[o-(dimethylamino)phenyl]- 3975-66-4, Anthranilic acid, N-[p-(dimethylamino)phenyl]- 3975-67-5, Anthranilic acid, N-[m-(dimethylamino)phenyl]- **3975-68-6**, Acridine, 4-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride **3975-69-7**, Acridine, 2-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride 3975-70-0, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-3-(dimethylamino)-, trihydrochloride **4036-24-2**, Acridine, 3-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride 4036-25-3, Acridine, 2-(dimethylamino)-9-[[4-(dimethylamino)butyl]amino]-, trihydrochloride 4289-47-8, Acridine, 4-(dimethylamino)-9-[[4-(dimethylamino)butyl]amino]-, trihydrochloride 4490-62-4, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-4-(dimethylamino)-, trihydrochloride 4595-85-1, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-2-(dimethylamino)- 4595-89-5, Acridine, 3-(dimethylamino)-9-[[4-(dimethylamino)butyl]amino]-, trihydrochloride 4595-90-8, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-2-(dimethylamino)-, tripicrate
(prepn. of)

IT **3975-68-6**, Acridine, 4-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride **3975-69-7**, Acridine, 2-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride **4036-24-2**, Acridine, 3-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride
(prepn. of)

RN 3975-68-6 HCAPLUS

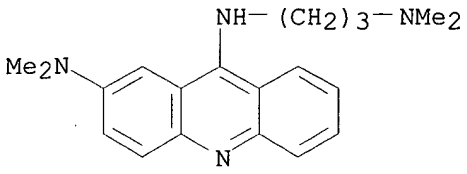
CN Acridine, 4-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride (7CI, 8CI) (CA INDEX NAME)



●3 HCl

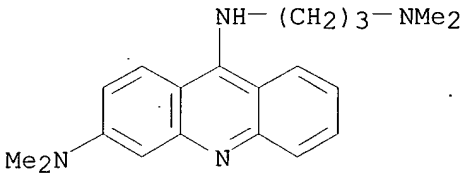
RN 3975-69-7 HCAPLUS

CN Acridine, 2-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride (7CI, 8CI) (CA INDEX NAME)



●3 HCl

RN 4036-24-2 HCAPLUS
CN Acridine, 3-(dimethylamino)-9-[[3-(dimethylamino)propyl]amino]-, trihydrochloride (7CI, 8CI) (CA INDEX NAME)



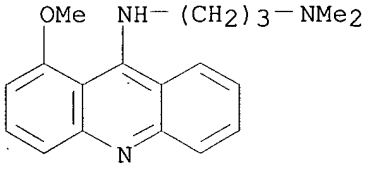
●3 HCl

L73 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1965:93856 HCAPLUS
DN 62:93856
OREF 62:**16837h,16838a-b**
TI Effect of acridine derivatives on the deoxyribonucleic acid content in sarcoma 180 in mice
AU Ledochowski, Zygmunt; Serozynska, Maria; Radzikowski, Czeslaw
CS Polska Akad. Nauk, Gdansk
SO Nowotwory (1964), 14(4), 317-24
DT Journal
LA Polish
CC 68 (Pharmacodynamics)
GI For diagram(s), see printed CA Issue.
AB The following data were reported for a no. of acridine derivs. (I) administered intraperitoneally (A) or by stomach tube (B) to mice with implanted sarcoma 180 (type of compd., n, R1, daily dosage in mg./kg., total dosage in mg./kg., route of administration, percent tumor inhibition, relative percent decrease of DNA P in the tumor and in the liver given): Ia, 3, 4-OMe, 0.1, 0.7, A, 20, 3, O; Ia, 3, 1-OMe, 0.8, 4, B, 37, -9, -5; Ia, 4, 3-OMe, 1, 4, B, 58, 15, 5; Ia, 4, 2-Me, 1, 3, B, 29, -6, -5; Ia, 4, 1-Me, 1, 3, B, 46, 8, 0; Ia, 4, 3-NO2, 1, 3, B, 14, 14, 5; Ia, 3, 1-Me, 0.1, 0.7, A, 16, 2, 0; Ib, --, 2-OMe, 0.1, 0.3, A, 10, 5, 0; Ia, 4, 1-NMe2, 0.1, 0.7, A, 46, 13, 4; Ia, 3, 8-NO2, 0.25, 1.5 mg./kg., A, 55, 20, 6. As a reference, 6-mercaptopurine was given similarly (same data given): 75 mg./kg. daily for 6 days, A, 68, 51, 24; 75 mg./kg. daily for 8 days, A, 75, 55, 24; 100 mg./kg. daily, A, 80, 59, 25. Tumor growth inhibition due to I was considered to be unrelated to DNA synthesis.
IT Deoxyribonucleic acids
(in sarcoma, effect of acridine derivs. on)
IT Sarcoma
(inhibitors of, acridine derivs. as)

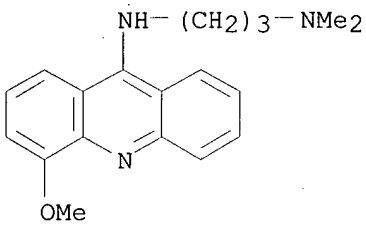
IT **3323-61-3**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy-
3324-09-2, Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methoxy-
3505-65-5, Acridine, 9-[[4-(dimethylamino)butyl]amino]-3-methoxy-
4292-63-1, Acridine, 9-[[4-(dimethylamino)butyl]amino]-3-nitro-
4292-64-2, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxy-
4533-37-3, Acridine, 9-[[4-(dimethylamino)butyl]amino]-2-methyl-
4533-38-4, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl-
4533-39-5, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-nitro-
4552-23-2, Acridine, 9-[[4-(dimethylamino)butyl]amino]-1-methyl-
4574-03-2, Acridine, 1-(dimethylamino)-9-[[4-(dimethylamino)butyl]amino]-
(sarcoma inhibition by, deoxyribonucleic acid metabolism and)

IT **3323-61-3**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy-
3324-09-2, Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methoxy-
4533-38-4, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl-
(sarcoma inhibition by, deoxyribonucleic acid metabolism and)

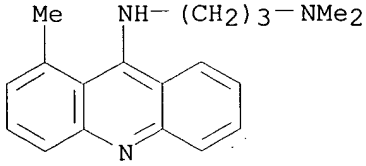
RN 3323-61-3 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy- (7CI, 8CI) (CA INDEX NAME)



RN 3324-09-2 HCAPLUS
CN 1,3-Propanediamine, N'-(4-methoxy-9-acridinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

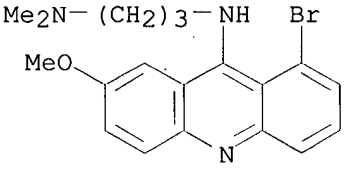


RN 4533-38-4 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl- (7CI, 8CI) (CA INDEX NAME)

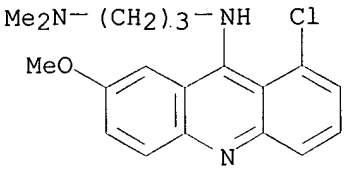


L73 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1964:495373 HCAPLUS
DN 61:95373
OREF 61:**16622d-e**
TI Relation between chemical structure and tumor-inhibiting activity of acridine derivatives

AU Ledochowski, Z.; Ledochowski, A.; Radzikowski, C.
CS Politech. Univ., Gdansk, Pol.
SO Acta, Unio Intern. Contra Cancrum (1964), 20(1-2), 122-5
DT Journal
LA English
CC 68 (Pharmacodynamics)
AB A no. of acridine derivs. were tested in vivo for anti-tumor activity in mice. Some active compds. had the N,N-dimethylaminobutylamine side chain at position 9. While compds. with Br in the 1 or 3 position were active, their Cl analogs were inactive. Replacement of 2 Et for 2 Me groups at the terminal N atom reduced the activity. In some instances, the nearest homologs of compds. with dimethylaminobutylamine were active. Some derivs. of azaacridine, benzacridine, quinoline, and intermediates in the acridine synthesis were inactive.
IT Neoplasms
(inhibitors of, acridine derivs. as)
IT Acridine, 1-chloro-9-[[4-(diethylamino)-1-methylbutyl]amino]-7-methoxy-
(as neoplasm inhibitor)
IT 970-09-2, Acridine, 9-[[4-(dimethylamino)butyl]amino]- 977-95-7, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]- 1046-70-4, Acridine, 9-[[4-(diethylamino)butyl]amino]- 1049-03-2, Acridine, 1-bromo-9-[[4-(dimethylamino)butyl]amino]-7-methoxy- 1908-39-0, Acridine, 6-bromo-9-[[4-(dimethylamino)butyl]amino]-2-methoxy- 13324-44-2, Acridine, 1-bromo-9-[[4-(diethylamino)-1-methylbutyl]amino]-7-methoxy- 13365-36-1, Acridine, 9-[[2-(dimethylamino)ethyl]amino]- 15016-04-3, Acridine, 3-chloro-9-[[4-(dimethylamino)butyl]amino]- 15016-06-5, Acridine, 3-bromo-9-[[4-(dimethylamino)butyl]amino]- **94379-31-4**, Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy- **94379-61-0**, Acridine, 1-chloro-9-[[3-(dimethylamino)propyl]amino]-7-methoxy- 94804-71-4, Acridine, 1-chloro-9-[[4-(dimethylamino)butyl]amino]-7-methoxy- 94804-73-6, Acridine, 6-chloro-9-[[4-(dimethylamino)butyl]amino]-1-methoxy- 95129-10-5, Acridine, 1-bromo-9-[[4-(diethylamino)butyl]amino]-7-methoxy- 95433-79-7, Acridine, 6-bromo-9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxy- 95949-46-5, Acridine, 6-bromo-9-[[4-(diethylamino)butyl]amino]-2-methoxy- 99061-33-3, Acridine, 6-bromo-9-[[4-(dimethylamino)butyl]amino]-2-ethoxy-
(as neoplasm inhibitor)
IT 4292-62-0, Acridine, 9-[[4-(dimethylamino)butyl]amino]-4-methoxy-
(neoplasm inhibition by)
IT **94379-31-4**, Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy- **94379-61-0**, Acridine, 1-chloro-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-
(as neoplasm inhibitor)
RN 94379-31-4 HCAPLUS
CN Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy- (6CI, 7CI) (CA INDEX NAME)



RN 94379-61-0 HCAPLUS
CN Acridine, 1-chloro-9-[[3-(dimethylamino)propyl]amino]-7-methoxy- (7CI) (CA INDEX NAME)



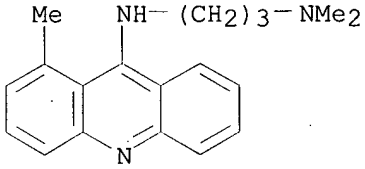
L73 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1964:411263 HCAPLUS
DN 61:11263
OREF 61:**1830d-g**
TI Tumor-inhibiting compounds. XXI. Some N9-derivatives of 1 (and 2,3,or 4)-methyl-9-aminoacridine
AU Ledochowski, Andrzej; Stefanska, Barbara; Kozinska, Barbara
CS Inst. Tech., Gdansk, Pol.
SO Roczniki Chem. (1964), 38(3), 421-4
DT Journal
LA Unavailable
CC 37 (Heterocyclic Compounds (One Hetero Atom))
GI For diagram(s), see printed CA Issue.
AB cf. CA 60, 14472a. 4-Methyl-9-(4-dimethylaminobutylamino)acridine-2HCl was active when tested on sarcoma 180 in mice. A mixt. (30 g.) contg. 1- and 3-methyl-9-chloroacridine was crystd. from C6H6 to give 10 g. 1-methyl-9-chloroacridine, m. 93-5.degree. (C6H6). The filtrate evapd. to dryness and refluxed with 100 ml. N HCl gave after 15 min. a ppt., m. 304-6.degree., and after 25 min. 3-methylacridone (I), m. 332-5.degree.. I when chlorinated gave 3 g. 3-methyl-9-chloroacridine (II), m. 118-19.5.degree. (H2O-EtOH). II (5.6 g.) and 10 g. PhOH was heated 30 min. on a water bath to give 6.4 g. 3-methyl-9-phenoxyacridine (III), m. 141-3.degree. (C6H6). A mixt. of 2.8 g. III and 5 g. PhOH was heated 30 min. on a water bath, cooled, treated with 1.2 g. H2NCH2CH2NMe2.HCl and heated again 1.5 hrs. to give 3-methyl-9-(N,N-dimethylaminoethylamino)acridine dihydrochloride, m. 240-1.degree. (anhyd. EtOH). The following IV.xHCl were similarly prepd. (R, position of Me group, x, m.p., and % yield given): NHNMe2, 2, 1, 230-1.degree., 52; NHNMe2, 4, 1, 240.degree., 55; NH(CH2)2NMe2, 1, 2, 239-40.degree., 86; NH(CH2)2NMe2, 2, 2, 254-6.degree., 80; NH(CH2)2NMe2, 4, 2, 250-1.degree., 91; NH(CH2)3NMe2, 1, 2, 246-7.degree., 75; NH(CH2)3NMe2, 2, 2, 242-3.degree., 84; NH(CH2)3NMe2, 3, 2, 236-7.degree., 90; NH(CH2)3NMe2, 4, 2, 243-4.degree., 80; NH(CH2)4NMe2, 1, 2, 251-2.degree., 78; NH(CH2)4NMe2, 2, 2, 250-1.degree., 63; NH(CH2)4NMe2, 3, 2, 221-2.degree., 84; NH(CH2)4NMe2, 4, 2, 241-2.degree., 73; NHCHMe(CH2)3NEt2, 1, 2, 150.degree., 79; NHCHMe(CH2)3NEt2, 2, - (picrate), 182-3.degree., 85; NHCHMe(CH2)3NEt2, 3, 2, 220.degree., 80; NHCHMe(CH2)3NEt2, 4, 2, 130.degree., 63; PhO, 1,-, 161-3.degree., 95; PhO, 2,-, 133-4.degree., 85; PhO, 3, -, 141-3.degree., 90; PhO, 4, -, 121-2.degree., 90.
IT Cancer
(inhibitors of)
IT Benzo [f] quinoline, 1,2,3,4,4a,5,6,10b-octahydro-4-methyl-, picrate, cis-
Benzo [f] quinoline, 1,2,3,4,4a,5,6,10h-octahydro-, picrate, cis-
Cyclohexylamine, 2-phenyl-, picrate, cis-
Cyclohexylamine, 2-phenyl-, picrate, trans-
Phenanthridine, 1,2,3,4,4a,5,6,10b-octahydro-, picrate, cis-
Phenanthridine, 1,2,3,4,4a,5,6,10b-octahydro-5-methyl-, picrate, trans-
IT Nitrogen compounds
(heterocyclic)
IT 34273-93-3, Acridine, 9-aminomethyl-
(derivs., as cancer inhibitors)
IT 16492-08-3, Acridine, 9-chloro-1-methyl- 16492-10-7, Acridine, 9-chloro-3-methyl- 22147-09-7, Cyclohexylamine, 2-phenyl-, cis-

22148-43-2, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methyl-
23220-94-2, Formamide, N-(2-phenylcyclohexyl)-, cis- 23541-67-5,
Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-4-methyl-,
dihydrochloride 23541-69-7, Acridine, 9-[[4-(diethylamino)-1-
methylbutyl]amino]-3-methyl-, dihydrochloride **23541-70-0**,
Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl-, dihydrochloride
23541-71-1, Acridine, 9-[[2-(dimethylamino)ethyl]amino]-3-methyl-,
dihydrochloride **23552-15-0**, Acridine, 9-[[3-
(dimethylamino)propyl]amino]-3-methyl-, dihydrochloride **23552-20-7**
, Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methyl-, dihydrochloride
23552-21-8, Acridine, 9-[[2-(dimethylamino)ethyl]amino]-2-methyl-,
dihydrochloride 23552-22-9, Acridine, 9-[[2-(dimethylamino)ethyl]amino]-
4-methyl-, dihydrochloride 23552-23-0, Acridine, 9-[[4-
(dimethylamino)butyl]amino]-2-methyl-, dihydrochloride 23552-24-1,
Acridine, 9-[[4-(dimethylamino)butyl]amino]-4-methyl-, dihydrochloride
23552-25-2, Acridine, 9-[[4-(dimethylamino)butyl]amino]-1-methyl-,
dihydrochloride 23552-26-3, Acridine, 9-[[4-(dimethylamino)butyl]amino]-
3-methyl-, dihydrochloride **23552-29-6**, Acridine,
9-[[3-(dimethylamino)propyl]amino]-4-methyl-, dihydrochloride
57165-19-2, 9-Acridanone, 3-methyl- 61078-23-7, Acridine,
1-methyl-9-phenoxy- 61078-24-8, Acridine, 2-methyl-9-phenoxy-
61078-25-9, Acridine, 4-methyl-9-phenoxy- 63211-78-9, Phenanthridine,
1,2,3,4,4a,5,6,10b-octahydro-5-methyl-, cis- 90679-75-7, Phenanthridine,
1,2,3,4-tetrahydro- 92028-13-2, Phenanthridine, 1,2,3,4-tetrahydro-,
hydrochloride 94578-46-8, Acridine, 3-methyl-9-phenoxy- 95170-46-0,
Phenanthridine, 1,2,3,4-tetrahydro-, picrate 95700-05-3, Acridine,
9-[[2-(dimethylamino)ethyl]amino]-1-methyl-, dihydrochloride 96169-88-9,
Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-1-methyl-,
dihydrochloride 96712-05-9, Acridine, 9-[[4-(diethylamino)-1-
methylbutyl]amino]-2-methyl-, dipicrate 97079-27-1, Benzo [f] quinoline,
1,2,3,4,7,8,9,10-octahydro-, picrate 98075-30-0, Acridine,
9-(2,2-dimethylhydrazino)-4-methyl-, hydrochloride 98089-38-4, Acridine,
9-(2,2-dimethylhydrazino)-2-methyl-, hydrochloride
(prepn. of)

IT **23541-70-0**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl-
, dihydrochloride **23552-15-0**, Acridine, 9-[[3-
(dimethylamino)propyl]amino]-3-methyl-, dihydrochloride **23552-20-7**
, Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methyl-, dihydrochloride
23552-29-6, Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methyl-
, dihydrochloride
(prepn. of)

RN 23541-70-0 HCAPLUS

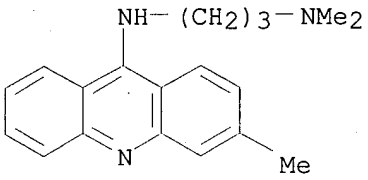
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methyl-, dihydrochloride
(7CI, 8CI) (CA INDEX NAME)



●2 HCl

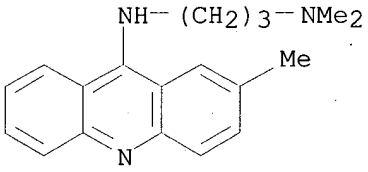
RN 23552-15-0 HCAPLUS

CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methyl-, dihydrochloride
(7CI, 8CI) (CA INDEX NAME)



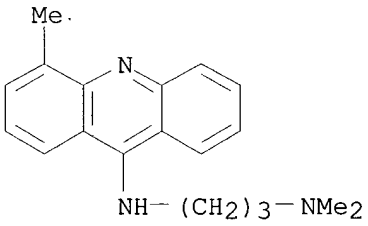
●2 HCl

RN 23552-20-7 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methyl-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

RN 23552-29-6 HCAPLUS
CN 1,3-Propanediamine, N,N-dimethyl-N'-(4-methyl-9-acridinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

L73 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1964:82776 HCAPLUS
DN 60:82776
OREF 60:**14471g-h,14472a**
TI Tumor-inhibiting compounds. XVIII. Investigations on the relationship between antitumor activity and the chemical structure of some N-substituted acridones and thioacridones. 1
AU Ledochowski, Zygmunt; Wysocka-Skrzela, Barbara
CS Polish Acad. Sci., Gdansk
SO Roczniki Chem. (1964), 38(2), 225-7
DT Journal
LA Unavailable
CC 37 (Heterocyclic Compounds (One Hetero Atom))
AB I were synthesized as potential anticancer agents. Thus, a soln. of 3.9

g. 9-acridone, 2.4 g. Cl(CH2)3NMe, 1 g. powd. NaNH2, and 20 ml. anhyd. PhMe was heated 4 hrs. at 130.degree., and the product isolated as the HCl salt yielded 78% I.HCl [R = (CH2)3NMe2], m. 220-1.degree. (alc.). Similarly prepd. were the following I (R, no. of HCl mols., m.p., and % yield given): (CH2)2NMe2, 1, 213-14.degree., 61; (CH2)2NEt2, 1, 234-5.degree., 58; CH(CH2NMe2)2, 0, 109-10.degree., 66; CH(CH2NEt2)2, 0, 115-16.degree., 64.

IT Neoplasms
(inhibitors of)

IT Neoplasms
(inhibitors of, 9-acridanones and 9-acridanthiones as)

IT 9-Acridanone, 10-[2-(diethylamino)-1-[(diethylamnino)-methyl]ethyl]-

IT 578-95-0, 9-Acridanone
(derivs., as neoplasm inhibitors)

IT 6540-78-9, 9-Acridanthione
(derivs., for use as neoplasm inhibitors)

IT 94912-92-2, 9-Acridanone, 10-[2-(dimethylamino)-1-[(dimethylamino)-methyl]ethyl]- 100213-31-8, 9-Acridanone, 10-[3-(dimethylamino)propyl]-, hydrochloride
(prepn. of)

L73 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1964:82775 HCAPLUS
DN 60:82775
OREF 60:**14471c-g**
TI Tumor-inhibiting compounds. XVI. Some N9-derivatives of 1-, 2-, 3-, and 4-methoxy-9-aminoacridine
AU Ledochowski, Andrzej; Kozinska, Barbara; Stefanska, Barbara
CS Inst. Tech., Gdansk, Pol.
SO Roczniki Chem. (1964), 38(2), 219-24
DT Journal
LA Unavailable
CC 37 (Heterocyclic Compounds (One Hetero Atom))
GI For diagram(s), see printed CA Issue.
AB cf. CA 60, 1697a. A mixt. of 7.8 g. o-ClC6H4CO2H, 7.4 g. m-MeOC6H4NH2, 6.9 g. anhyd. K2CO3, 0.08 g. Cu dust, and 100 ml. iso-AmOH was refluxed 3.5 hrs. to give 6.2 g. o-HO2CC6H4NHC6H4R (I) (R = 3-MeO) (II), m. 132-3.degree. (EtOH-H2O). Similarly prepd. were the following I (R, m.p., and % yield given): 2-MeO, 176.degree., 30; 4-MeO, 184.degree., 67. A soln. of 4.8 g. II in 11 ml. POCl3 was heated 2 hrs. at 120.degree., cooled, and poured into a mixt. of NH4OH and ice to give 4.2 g. of a mixt. contg. III (R = Cl, R1 = 1-MeO) (IV), and III (R = Cl, R1 = 3-MeO) (V), m. 120-60.degree.. The mixt. extd. 5 min. with boiling alc. NH3 yielded 24% IV, m. 125-7.degree. (cyclohexane), and 53% V, m. 166-8.degree. (C6H6). The following III (R = Cl) were prepd. (R1, m.p., and % yield given): 2-MeO, 124-6.degree., 60; 4-MeO, 154.degree., 80. V (5.8 g.) heated with 10 g. PhOH during 30 min. on a water bath gave 5.4 g. III (R = PhO, R1 = 3-MeO), m. 152-3.degree. (C6H6). Similarly prepd. were III (R = PhO) (R1, m.p., and % yield given): 1-MeO, 151.degree. (cyclohexane), 80; 2-MeO, 163-4.degree., 94; 4-MeO, 149-50.degree., 90. A mixt. of 2.44 g. V and 5 g. PhOH was heated 30 min. on a water bath, cooled, treated with 1.5 ml. Me2N(CH2)3NH2, and heated 1.5 hrs. and the product isolated as the HCl salt to yield 76% III. HCl (R = NH(CH2)3NMe2, R1 = 3-MeO), m. 247-9.degree. (anhyd. EtOH). Similarly prepd. were the following III (R, R1, no. of HCl mols., m.p. salt, and % yield given): NHNMe2, 1-MeO, 1, 198-9.degree., 60; NH(CH2)2NMe2, 1-MeO, 2, 228-30.degree., 80; NH(CH2)4NMe2, 1-MeO, 2, 230.degree. (decompn.), 59; NHCHMe(CH2)3NEt2, 1-MeO, 2, 138-40.degree., 86; NHNMe2, 2-MeO, 1, 213-14.degree., 64, NH(CH2)2NMe2, 2-MeO, 2, 253-4.degree., 63; NH(CH2)3NMe2, 2-MeO, 2, 240-2.degree., 84; NH(CH2)4NMe2, 2-MeO, 2, 231.5-32.degree., 80; NHCHMe(CH2)3NEt2, 2-MeO, 2, 235-6.degree., 78; NHC6H4NMe2, 2-MeO, 0, 188-9.degree., -; NHC6H4NMe2, 2-MeO, 2, 227-9.degree., 43; NHNMe2, 3-MeO, 0, 178-9.degree., -; NHNMe2, 3-MeO, 1, 198-200.degree., 81; NH(CH2)2NMe2,

3-MeO, 2, 222-4.degree., 80; NH(CH2)3NMe2, 3-MeO, 2, 212-13.5.degree., 80; NH(CH2)4NMe2, 3-MeO, 2, 180-2.degree., 66; NHCHMe(CH2)3NEt2, 3-MeO, 2, 203-5.degree., 93; NHNMe, 4-MeO, 1, 186-7.degree., 19; NH(CH2)2NMe2, 4-MeO, 2, 225-6.degree., 33; NH(CH2)3NMe2, 4-MeO, 2, 225-6.degree., 30; NH(CH2)4NMe2, 4-MeO, 2(VI), 204-5.5.degree., 30; NHC6H4NMe2, 4-MeO, 2,200.degree. (decompn.), 49; NHCHMe(CH2)3NEt2, 4-MeO, -, (picrate, m. 160-1.degree.), 66. VI was active when tested on sarcoma 180 in mice.

IT Neoplasms
(inhibitors of)

IT Acridine, 9-[(dimethylamino)anilino]-1-methoxy-, dihydrochloride

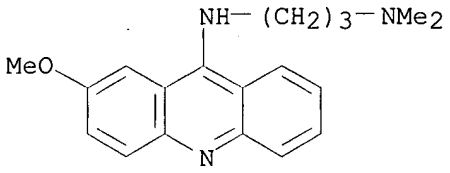
IT 3407-99-6, Acridine, 9-amino-2-methoxy- 10496-96-5, Acridine, 9-amino-4-methoxy- 23045-25-2, Acridine, 9-amino-1-methoxy- 23045-26-3, Acridine, 9-amino-3-methoxy-
(derivs.)

IT 13278-32-5, Anthranilic acid, N-(o-methoxyphenyl)- 13501-67-2, Anthranilic acid, N-(p-methoxyphenyl)- 16492-12-9, Acridine, 9-chloro-1-methoxy- 16492-13-0, Acridine, 9-chloro-2-methoxy- 16492-14-1, Acridine, 9-chloro-3-methoxy- 16492-15-2, Acridine, 9-chloro-4-methoxy- 22089-29-8, Acridine, 9-(2,2-dimethylhydrazino)-2-methoxy- **23552-01-4**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride 23552-02-5, Acridine, 9-[[4-(dimethylamino)butyl]amino]-4-methoxy-, dihydrochloride **23552-04-7**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy-, dihydrochloride **23552-06-9**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methoxy-, dihydrochloride 23552-07-0, Acridine, 9-[[2-(dimethylamino)ethyl]amino]-2-methoxy-, dihydrochloride 23552-09-2, Acridine, 9-[[2-(dimethylamino)ethyl]amino]-4-methoxy-, dihydrochloride 23552-11-6, Acridine, 9-[[4-(dimethylamino)butyl]amino]-1-methoxy-, dihydrochloride 23552-12-7, Acridine, 9-[[4-(dimethylamino)butyl]amino]-3-methoxy-, dihydrochloride 23552-16-1, Acridine, 9-[[2-(dimethylamino)ethyl]amino]-1-methoxy-, dihydrochloride 23552-18-3, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxy-, dihydrochloride 23552-19-4, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-3-methoxy-, dihydrochloride **23552-28-5**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methoxy-, dihydrochloride 24430-81-7, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-4-methoxy-, hydrochloride 27693-73-8, Anthranilic acid, N-(m-methoxyphenyl)- 61078-20-4, Acridine, 2-methoxy-9-phenoxy- 61078-21-5, Acridine, 3-methoxy-9-phenoxy- 61078-22-6, Acridine, 4-methoxy-9-phenoxy- 94578-59-3, Acridine, 1-methoxy-9-phenoxy- 96001-53-5, Acridine, 9-[4-(dimethylamino)butyl]amino]-2-methoxy-, dihydrochloride 96712-06-0, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]-amino]-1-methoxy-, dipicrate 98075-35-5, Acridine, 9-(2,2-dimethylhydrazino)-1-methoxy-, hydrochloride 98075-36-6, Acridine, 9-(2,2-dimethylhydrazino)-2-methoxy-, hydrochloride 98075-37-7, Acridine, 9-(2,2-dimethylhydrazino)-3-methoxy-, hydrochloride 98075-38-8, Acridine, 9-(2,2-dimethylhydrazino)-4-methoxy-, hydrochloride 106977-77-9, Acridine, 9-[(dimethylamino)anilino]-3-methoxy-, dihydrochloride 106977-78-0, Acridine, 9-[(dimethylamino)anilino]-3-methoxy- 107632-28-0, Acridine, 9-[[2-(dimethylamino)ethyl]amino]-3-methoxy-, dihydrochloride
(prepn. of)

IT **23552-01-4**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride **23552-04-7**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy-, dihydrochloride **23552-06-9**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methoxy-, dihydrochloride **23552-28-5**, Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methoxy-, dihydrochloride
(prepn. of)

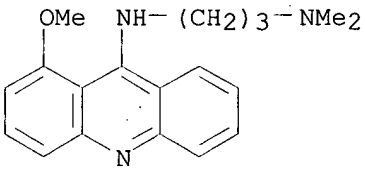
RN 23552-01-4 HCAPLUS

CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



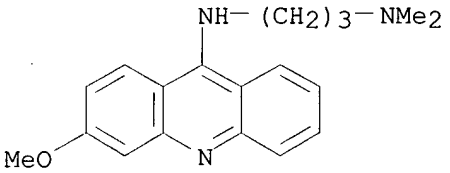
●2 HCl

RN 23552-04-7 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-1-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



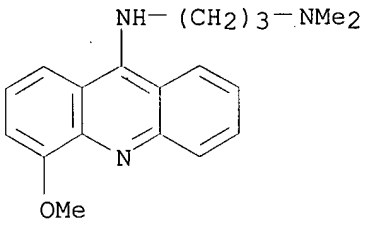
●2 HCl

RN 23552-06-9 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-3-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

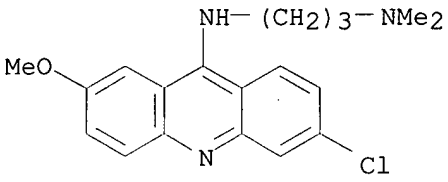
RN 23552-28-5 HCAPLUS
CN Acridine, 9-[[3-(dimethylamino)propyl]amino]-4-methoxy-, dihydrochloride (7CI, 8CI) (CA INDEX NAME)



●2 HCl

L73 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1964:78130 HCAPLUS
DN 60:78130
OREF 60:**13755h,13756a-d**
TI Antineoplastic compounds. II. Effect of 38 compounds of the groups III-X on the growth of Crocker sarcoma in mice
AU Radzikowski, Czeslaw; Ledochowski, Zygmunt; Ledochowski, Andrzej; Ruprecht, Maria; Hrabowska, Maria
CS Akad. Med., Gdansk, Pol.
SO Patol. Polska (1962), 13(1), 39-58
DT Journal
LA Unavailable
CC 68 (Pharmacodynamics)
AB cf. CA 53, 9469i. Oral administration of several substituted acridines to mice with Crocker sarcoma gave the following results (substituent(s), daily dosage in mg., total dosage in mg., % inhibition given): 3-Cl, 5-MeO, 9-R, 3, 21, 15; 3-Cl, 6-MeO, 9-R, 3, 21, 0; 3-Cl, 8-MeO, 9-R, 3, 21, 55; 3-Cl, 7-MeO, 9-R, 3, 21, 33; same compd., 3, 36, 76; 1-Cl, 7-MeO, 9-R, 3, 21, 17; 2-Cl, 7-MeO, 9-R, 3, 36, 16; 4-Cl, 7-MeO, 9-R, 3, 21, 43; 1-Cl, 9-R, 3, 36, -7; 3-Cl, 9-R, 3, 36, -27; 1-Br, 9-R, 3, 36, -7; 3-Br, 9-R, 3, 21, 40; 9-R, 3, 36, 73; 2-MeO, 9-R, 3, 36, 38 (in all the compds. above, R = Me2N(CH2)4NH); 3-Cl, 7-MeO, 9-H2N(CH2)4NH, 3, 18, 0; 3-Cl, 7-MeO, 9-Et2N(CH2)3CHMeNH [bis(methanesulfonate)], 0.3 subcutaneously, 3.6, 66; 3-Cl, 7-MeO, 9-Me2N(CH2)3NH, 3, 36, 8; 3-Cl, 7-MeO, 9-(HOCH2CH2)2N(CH2)4NH, 3, 18, 0; 3-Cl, 7-MeO, 10-oxide, 9-Et2N(.fwdarw.O)(CH2)3CHMeNH, 3, 18, 29; 1-Br, 7-MeO, 9-Et2N(CH2)4NH, 3, 36, -25; 1-Br, 7-MeO, 9-Et2N(CH2)10NH, 3, 21, -30. Other acridine derivs. tested were (same data given): N,N'-bis(3-chloro-7-methoxy-9-acridyl)putrescine, 3, 18, 0; N,N'-bis(9-acridyl)putrescine, 3, 18, -10; 12-[(4-dimethylamino)butylamino]-benz[.alpha.]acridine, 1.5, 10.5, 4; 12-[(4-dimethylamino)butylamino]benz-[c]acridine, 1.5, 10.5, 15. All of the compds. listed above were tested in the form of the di-HCl salts. The next series of expts. involved derivs. of phenylanthranilic acid of the general structure 2,5- NaO2C(R1)C6H3 N(R)C6H4R2-4 (R, R1, R2, and the same biol.-testing data as above given): H, H, H, 3, 36, -46; Ph, H, H, 3, 36, -12; Me, H, H, 3, 36, 49; H, Br, H, 3, 18, 8; H, Cl, MeO, 3, 36, 55. The biol. testing comprised also certain intermediates and quinoline analogs (same biol. data as above): anthranilic acid, 3, 36, -9; 2,4-dichlorobenzoic acid, 3, 36, 31; N,N-diethylputrescine, 3, 36, 8; N,N-dimethylputrescine, 3, 36, 66; N-(2-diethylaminoethyl)-4-aminobenzamide-2HCl, 3, 36, 42; N-(4-quinolyl)-N',N'-dimethyl putrescine-2HCl, 3, 36, 13; N-(3-chloro-4-quinolyl)-N',N'-dimethylputrescine-2HCl, 3, 36, 26; N-(7-chloro-4-quinolyl)-N',N'-dimethyl-1,3-diaminopropane-2HCl, 3, 36, -31; N-(7-bromo-4-quinolyl)-N',N'-dimethyl-1,3-diaminopropane-2HCl, 3, 36, -32. A discussion is presented of the relation between the chem. structure and the biol. activity.
IT Sarcoma

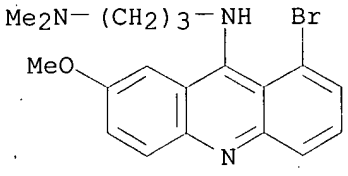
(inhibitors of, acridine derivs., quinoline analogs, etc., as)
IT Acridine, 1-chloro-9-[[4-(dimethylamino)butyl]amino]-, dihydroohloride
Acridine, 6-chloro-9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxy-
(quinacrine), dimethanesulfonate, dihydrochloride
Acridine, 6-chloro-9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxy-
(quinacrine), dioxide, dihydrochloride
Benzamide, p-amino-N-[2-(diethylamino)ethyl]-, dihydrochloride
Ethanol, 2,2'-[[4-[(6-chloro-2-methoxy-9-acridinyl)amino]butyl]imino]di-,
dihydroehloride
(sarcoma inhibition by)
IT Benz[a]acridino, 12-[[4-(dimethylamino)butyl]amino]-, dihydrochloride
(sarcroma inhibition by)
IT 959-45-5, Piperidine, 1-(o-bromobenzyl)-2,2,6,6-tetramethyl-,
hydrochloride
(as nerve center-blocking agent)
IT 50-84-0, Benzoic acid, 2,4-dichloro- 91-38-3, Anthranilic acid,
4-chloro-N-(p-methoxyphenyl)- 91-40-7, Anthranilic acid, N-phenyl-
118-92-3, Anthranilic acid 3529-10-0, 1,4-Butanediamine, N,N-dimethyl-
5636-91-9, Acridine, 6-chloro-9-[[4-(dimethylamino)butyl]amino]-2-methoxy-
, dihydrochloride 17626-44-7, Anthranilic acid, N,N-diphenyl-
19218-86-1, Anthranilic acid, 4-bromo-N-phenyl- 23551-98-6, Acridine,
9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride 23551-99-7,
Acridine, 3-bromo-9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride
23552-00-3, Acridine, 6-chloro-9-[[4-(dimethylamino)butyl]amino]-1-methoxy-
, dihydrochloride 27431-62-5, 1,4-Butanediamine, N,N-diethyl-
35555-83-0, Acridine, 9,9'-(tetramethylenediimino)di-, dihydrochloride
58903-55-2, Acridine, 9,9'-(tetramethylenediimino)bis[6-chloro-2-methoxy-
59962-52-6, Acridine, 6-chloro-9-[[3-(dimethylamino)propyl]amino]-
2-methoxy-, dihydrochloride 73323-82-7, Anthranilic acid,
N-methyl-N-phenyl- 93896-89-0, Quinoline, 7-bromo-4-[[3-
(dimethylamino)propyl]amino]-, dihydrochloride 93897-10-0, Quinoline,
7-chloro-4-[[3-(dimethylamino)propyl]amino]-, dihydrochloride
94204-64-5, Quinoline, 3-chloro-4-[[4-(dimethylamino)butyl]amino]-,
dihydrochloride 94296-96-5, Quinoline, 4-[[4-(dimethylamino)butyl]amino]-
, dihydrochloride 95426-40-7, Acridine, 9-[(4-aminobutyl)amino]-6-chloro-
2-methoxy-, dihydrochloride 95428-48-1, Acridine, 1-bromo-9-[[4-
(dimethylamino)butyl]amino]-, dihydrochloride 95428-60-7, Acridine,
3-chloro-9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride 95946-18-2,
Acridine, 1-chloro-9-[[4-(dimethylamino)butyl]amino]-7-methoxy-,
dihydrochloride 95946-19-3, Acridine, 2-chloro-9-[[4-
(dimethylamino)butyl]amino]-7-methoxy-, dihydrochloride 95946-20-6,
Acridine, 3-chloro-9-[[4-(dimethylamino)butyl]amino]-5-methoxy-,
dihydrochloride 95946-21-7, Acridine, 3-chloro-9-[[4-
(dimethylamino)butyl]amino]-6-methoxy-, dihydrochloride 95946-22-8,
Acridine, 5-chloro-9-[[4-(dimethylamino)butyl]amino]-2-methoxy-,
dihydrochloride 95949-45-4, Acridine, 1-bromo-9-[[4-
(diethylamino)butyl]amino]-7-methoxy-, dihydrochloride 96001-53-5,
Acridine, 9-[4-(dimethylamino)butyl]amino]-2-methoxy-, dihydrochloride
96370-52-4, Benz[c]acridine, 9-[[4-(dimethylamino)butyl]amino]-,
dihydrochloride 96868-08-5, Acridine, 1-bromo-9-[[10-
(diethylamino)decyl]amino]-7-methoxy-, dihydrochloride
(sarcoma inhibition by)
IT **59962-52-6**, Acridine, 6-chloro-9-[[3-(dimethylamino)propyl]amino]-
2-methoxy-, dihydrochloride
(sarcoma inhibition by)
RN 59962-52-6 HCAPLUS
CN 1,3-Propanediamine, N'-(6-chloro-2-methoxy-9-acridinyl)-N,N-dimethyl-,
dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

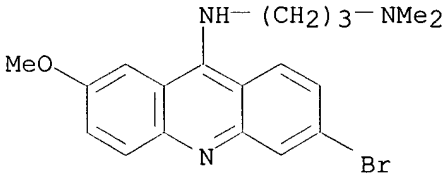
L73 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1963:465080 HCAPLUS
DN 59:65080
OREF 59:**12046h,12047a**
TI Tumor-inhibiting compounds in the group of 9-aminoacridine derivatives
AU Ledochowski, Z.; Ledochowski, A.; Radzikowski, C.
CS Politech., Danzig, Pol.
SO Bull. Acad. Polon. Sci., Ser. Sci. Chim. (1961), 9, 179-82
DT Journal
LA English
CC 68 (Pharmacodynamics)
AB A total of 49 derivs. of 9-aminoacridine, 27 derivs. of N-phenylanthranilic acid, and 21 derivs. of 9-chloroacridine were prepd. and investigated as to their tumor-inhibiting activity on mice with Crocker sarcoma. A correlation existed between the structure of the examd. compds. and their tumor-inhibiting activity. Of the 6 compds. which proved to be active, 5 were derivs. of N,N-dimethylputrescine and only one a deriv. of N,N-dimethyl-1,3-diaminopropane; the derivs. contg. other amines in position 9 were inactive. The activity is usually suppressed by the substitution of Cl for Br in position 1 or 3, H for Br, and Et for the Me group at the terminal N of the side chain.
IT Neoplasms
(inhibitors of, 9-aminoacridine deriv. as)
IT Sarcoma
(inhibitors of, 9-aminoacridine derivs. as)
IT 90-45-9, Acridine, 9-amino-
(derivs., as neoplasm inhibitors)
IT **23551-95-3**, Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride 23551-96-4, Acridine, 1-bromo-9-[[4-(dimethylamino)butyl]amino]-7-methoxy-, dihydrochloride 23551-97-5, Acridine, 6-bromo-9-[[4-(dimethylamino)butyl]amino]-2-methoxy-, dihydrochloride 23551-98-6, Acridine, 9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride 23551-99-7, Acridine, 3-bromo-9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride 23552-00-3, Acridine, 6-chloro-9-[[4-(dimethylamino)butyl]amino]-1-methoxy-, dihydrochloride **95428-49-2**, Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]-amino]-2-methoxy-, dihydrochloride 95618-14-7, Acridine, 1-bromo-9-[[2-(dimethylamino)ethyl]amino]-7-methoxy-, dihydrochloride 95618-15-8, Acridine, 6-bromo-9-[[2-(dimethylamino)ethyl]amino]-2-methoxy-, dihydrochloride 99061-34-4, Acridine, 1-bromo-9-[[5-(dimethylamino)pentyl]amino]-7-methoxy-, dihydrochloride 99114-54-2, Acridine, 6-bromo-9-[[5-(dimethylamino)pentyl]amino]-2-methoxy-, dihydrochloride
(neoplasm inhibition by)
IT 50-35-1, Phthalimide, N-(2,6-dioxo-3-piperidyl)-
(neoplasm response to)
IT **23551-95-3**, Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride **95428-49-2**, Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]-amino]-2-methoxy-, dihydrochloride

(neoplasm inhibition by)
RN 23551-95-3 HCAPLUS
CN Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride (6CI, 7CI, 8CI) (CA INDEX NAME)



●2 HCl

RN 95428-49-2 HCAPLUS
CN Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride (6CI, 7CI) (CA INDEX NAME)



●2 HCl

L73 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1963:464399 HCAPLUS
DN 59:64399
OREF 59:**11935h,11936a-b**
TI Experimental approaches to the chemotherapy of Trichomonas
AU Ryley, J. F.; Stacey, G. J.
CS Imp. Chem. Inds., Ltd., Macclesfield, UK
SO Parasitology (1963), 53, 303-20
DT Journal
LA Unavailable
CC 62 (Microbial Biochemistry)
AB Expts. with several compds. active in vitro, using cultures of the Belfast and Manley strains of T. foetus, T. vaginalis, T. gallinae, and the S and H 11 strains of T. suis showed that all responded in essentially the same manner to the drugs. In vivo tests were carried out in hamsters, mice, rats, and monkeys. Compds. active in vitro but with low in vivo activity included tetramethylthiuram disulfide, 7-chloro-4,6-dimethoxy-6'-benzylthio)-2'-methylspiro- [benzofuran-2(3H)] 1'-[2]cyclohexene-3,4'-dione, 6-chloro-9-[(3-diethylaminopropyl)amino]-2-methoxyacridine, quinoxaline N,-N'-dioxide, 2-amino-7H-benzo[e]perimidin-7-one, 6-[(3-diethylaminopropyl)amino]-7H-benzo[e]perimidin-7-one, 4-(5-nitro-2-furyl)-2-(3-pyridyl)thiazole, 5-nitro-N-(2-oxazolidinon-3-yl)-2-furamidine, aminitriazole, 2-formamido-4-nitrothiazole, and 1,1'-pentamethylenebis(4-nitropyrazole). Those active in vivo included: acriflavine, furazolidone, Milibis, Penotrane, picric acid, AgNO3, Steresil, and the following acridine derivs.: 9-NH2, 2,6-di-NH2; 2-MeO, 9-NHCH(Me)(CH2)3NEt2; 2-NO2, 9-NH-(CH2)3NEt2; 2-NO2, 9-NH(CH2)3NEt2, 6-Cl;

3-NO2, 9-NH-(CH2)3NEt2, 7-Cl, 5-Me; 2-NO2, 9-NH(CH2)3NEt2, 7-Me; 2,7-di-NO2, 9-NH(CH2)3NEt2; 3-NO2, 9-NHCH(Me)(CH2)3-NEt2.

IT Trichomonas
(chemotherapy of)

IT Mercury, phenylmercury methylenedi-2-naphthalenesulfonate
Penotran
Steresil
(Trichomonas response to)

IT 144-87-6, Arsanilic acid, N-glycoloyl-
(bismuth deriv., Trichomonas response to)

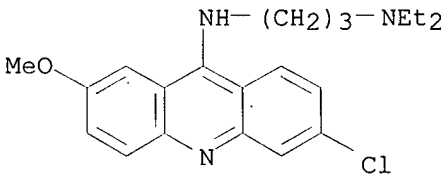
IT 31154-87-7, 2-Naphthalenesulfonic acid, methylenedi-
(phenylmercury deriv., Trichomonas response to)

IT 67-45-8, 2-Oxazolidinone, 3-[(5-nitrofurfurylidene)amino]- 88-89-1, Picric acid 116-49-4, Bismuth, oxo(hydrogen N-glycoloylarsanilato)- 137-26-8, Disulfide, bis(dimethylthiocarbamoyl) 2423-66-7, Quinoxaline, 1,4-dioxide 2731-45-5, Pyridine, 3-[4-(5-nitro-2-furyl)-2-thiazolyl]- 4292-64-2, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-2-methoxy- 7761-88-8, Silver nitrate 22157-48-8, Acridine, 9-[[4-(diethylamino)-1-methylbutyl]amino]-3-nitro- 23874-17-1, 7H-Benzo[e]perimidin-7-one, 2-amino- 65589-70-0, Acriflavine **67947-05-1**, Acridine, 6-chloro-9-[[3-(diethylamino)propyl]amino]-2-methoxy- 89280-18-2, Formamide, N-(4-nitro-2-thiazolyl)- 91803-24-6, Acridine, 2,6,9-triamino- 91969-20-9, Pyrazole, 1,1'-pentamethylenebis[4-nitro- 92336-52-2, 2-Furamidine, 5-nitro-N-(2-oxo-3-oxazolidinyl)- 94578-10-6, Acridine, 9-[[3-(diethylamino)propyl]amino]-2,7-dinitro- 94758-32-4, Acridine, 6-chloro-9-[[3-(diethylamino)propyl]amino]-2-nitro- 94758-70-0, Acridine, 9-[[3-(diethylamino)propyl]amino]-2-nitro- 95281-98-4, Acridine, 9-[[3-(diethylamino)propyl]amino]-2-methyl-7-nitro- 96171-41-4, Acridine, 2-chloro-9-[[3-(diethylamino)propyl]amino]-4-methyl-6-nitro- 96261-43-7, 7H-Benzo[e]perimidin-7-one, 6-[[3-(diethylamino)propyl]amino]- 104694-93-1, Spiro[benzofuran-2(3H),1'-[2]cyclohexene]-3,4'-dione, 6'-(benzylthio)-7-chloro-4,6-dimethoxy-2'-methyl-
(Trichomonas response to)

IT **67947-05-1**, Acridine, 6-chloro-9-[[3-(diethylamino)propyl]amino]-2-methoxy-
(Trichomonas response to)

RN 67947-05-1 HCAPLUS

CN 1,3-Propanediamine, N'-(6-chloro-2-methoxy-9-acridinyl)-N,N-diethyl- (9CI) (CA INDEX NAME)



L73 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2003 ACS

AN 1963:35499 HCAPLUS

DN 58:35499

OREF 58:**6101g-h**

TI Tumor-inhibiting activity of some 9-aminoacridines and related compounds

AU Radzikowski, C.; Ledochowski, Z.; Ledochowski, A.

SO Acta, Unio Intern. Contra Cancrum (1962), 18, 222-4

DT Journal

LA English

CC 68 (Pharmacodynamics)

AB A series of 60 acridines and related compds. (not listed) were screened for activity against sarcoma 180 in mice. Antitumor activity was present

in 7 of these, all of which were 9-acridyl derivs. of 4-dimethylaminobutylamine or 3-dimethyl- or 3-diethylpropylamine. Position 1 or 3 was generally substituted with Br and position 7 with MeO.

IT Sarcoma
(inhibitors of, 9-aminoacridines and related compds. as)

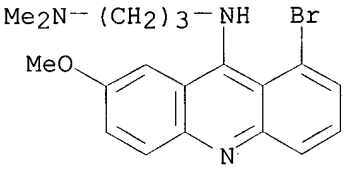
IT 1762-95-4, Ammonium thiocyanate 7783-20-2, Ammonium sulfate 12125-02-9, Ammonium chloride
(brain elec. activity response to)

IT 5636-91-9, Acridine, 6-chloro-9-[[4-(dimethylamino)butyl]amino]-2-methoxy-, dihydrochloride **23551-95-3**, Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride 23551-96-4, Acridine, 1-bromo-9-[[4-(dimethylamino)butyl]amino]-7-methoxy-, dihydrochloride 23551-97-5, Acridine, 6-bromo-9-[[4-(dimethylamino)butyl]amino]-2-methoxy-, dihydrochloride 23551-98-6, Acridine, 9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride 23551-99-7, Acridine, 3-bromo-9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride **98067-83-5**, Acridine, 1-bromo-9-[[3-(diethylamino)propyl]amino]-7-methoxy-, dihydrochloride
(sarcoma inhibition by)

IT **23551-95-3**, Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride **98067-83-5**, Acridine, 1-bromo-9-[[3-(diethylamino)propyl]amino]-7-methoxy-, dihydrochloride
(sarcoma inhibition by)

RN 23551-95-3 HCAPLUS

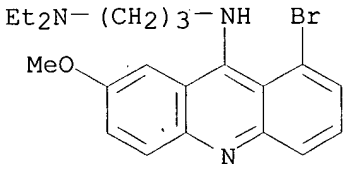
CN Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride (6CI, 7CI, 8CI) (CA INDEX NAME)



●2 HCl

RN 98067-83-5 HCAPLUS

CN Acridine, 1-bromo-9-[[3-(diethylamino)propyl]amino]-7-methoxy-, dihydrochloride (7CI) (CA INDEX NAME)



●2 HCl

L73 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2003 ACS

AN 1962:7649 HCAPLUS

DN 56:7649

OREF 56:**1428d-f**

TI Research of tumor-inhibiting compounds. IX. Synthesis of

(4-dimethylaminobutylamino)benzacridines and the relation between tumor-inhibiting activity and structure of some acridine and quinoline derivatives
AU Ledochowski, Zygmunt; Ledochowski, Andrzej; Radzikowski, Czeslaw; Wysocka-Skrzela, Barbara; Konopa, Jerzy; Jurkiewicz, Zbigniewa
CS Akad. Med., Gdansk, Pol.
SO Roczniki Chem. (1961), 35, 899-905
DT Journal
LA Unavailable
CC 31 (Heterocyclic Compounds-One Hetero Atom)
AB 12-Chlorobenz[a]acridine (4 g.) in 15 g. PhOH was heated 4 hrs. at 100.degree. with 1.8 g. 4-dimethylaminobutylamine. After sepn. of acridone there was obtained (repeated crystn, from EtOH-Et.O) 27% 12-(4-dimethylaminobutylamino)benz[a]acridine hydrochloride (I) (m. 214-18.degree.). 7-(4-Dimethylaminobutylamino)benz[c]acridine (II) (m. 120-30.degree.) was obtained similarly. Both I and II were active against Crocker's sarcoma in mice. Results of biol. tests of other acridine or quinoline derivs. (all were inactive), prepd. previously (cf. ibid. 34, 953(1960)), were presented and discussed.
IT Benz[a]acridino, 12-[[4-(dimethylamino)butyl]amino]-, dihydrochloride
Benz[c]acridine, 7-[[4-(dimethylamino)butyl]amino]-, dihydrochloride
IT 23551-98-6, Acridine, 9-[[4-(dimethylamino)butyl]amino]-, dihydrochloride
(cancer-inhibiting activity of)

L73 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1961:44554 HCAPLUS
DN 55:44554
OREF 55:**8646d-e**
TI The action of some acridine derivatives on the growth of Crocker sarcoma in mice
AU Radzikowski, Czestaw; Nazarewicz, Teresa; Ledochowski, Zygmunt; Ledochowski, Andrzej; Borowski, Edward
CS Med. Acad., Gdansk, Pol.
SO Polish Med. Sci. Hist. (1960), 3, 154-9
DT Journal
LA Unavailable
CC 11H (Biological Chemistry: Pharmacology)
AB The inhibiting action of 32 acridine derivs. on Crocker sarcoma 180 was studied. The test mice received 3 mg. daily of the compd. for 10 days after the sarcoma implantation and were examd. on the 10 to 14th days. Two compds., 1-bromo-7-methoxy-9-(3-dimethylaminopropylamino)acridine-2HCl and 1-bromo-7-methoxy-9-(4-dimethylaminobutylamino)acridine-2HCl, showed definite inhibition of sarcoma growth (less than one-half the size in controls). Both compds. showed toxicity. Five other compds. showed activity which was variable; all had the diamine chain at position-9, 4 had the methoxy group at 7 with 2 having Br at 1 and 2 with Cl at position-3. Anticancer action may be an antimitotic effect and the toxic effect indicates cytotoxic action.
IT Neoplasms
(inhibitors of, acridine derivs. as)
IT Methanesulfonic acid, compd. with quinacrine
(as neoplasm inhibitor)
IT 316-05-2, Quinacrine, dimethanesulfonate 970-09-2, Acridine, 9-[(4-dimethylaminobutyl)amino]- 1049-03-2, Acridine, 1-bromo-9-[(4-dimethylaminobutyl)amino]-7-methoxy- 1908-39-0, Acridine, 6-bromo-9-[(4-dimethylaminobutyl)amino]-2-methoxy- 7703-17-5, Acridine, 6-chloro-9-[(4-dimethylaminobutyl)amino]-2-methoxy- 15016-04-3, Acridine, 3-chloro-9-[(4-dimethylaminobutyl)amino]- 15016-06-5, Acridine, 3-bromo-9-[(4-dimethylaminobutyl)amino]- 22089-50-5, Acridine, 9-[(4-dimethylaminobutyl)amino]-2-methoxy- 55915-26-9, Acridine, 6-bromo-9-[(2-dimethylaminoethyl)amino]-2-methoxy- **55915-27-0**, Acridine, 6-bromo-9-[(3-dimethylaminopropyl)amino]-2-methoxy- 55915-28-1, Acridine, 6-bromo-9-[(5-dimethylaminopentyl)amino]-2-methoxy-

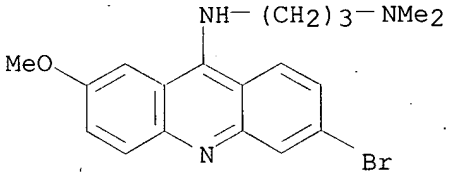
55935-12-1, Acridine, 6-chloro-9-[(3-dimethylaminopropyl)amino]-2-methoxy- 93010-51-6, Acridine, 6-bromo-9-(2,2-dimethylhydrazino)-2-methoxy- **94379-31-4**, Acridine, 1-bromo-9-[(3-dimethylaminopropyl)amino]-7-methoxy- 94804-71-4, Acridine, 1-chloro-9-[(4-dimethylaminobutyl)amino]-7-methoxy- 102559-53-5, Benz[c]acridine, 7-[(4-dimethylaminobutyl)amino]- 109559-05-9, Acridine, 1-bromo-9-[(2-dimethylaminoethyl)amino]-7-methoxy- 111584-11-3, Acridine, 6-bromo-9-(p-dimethylaminoanilino)-2-methoxy- 111584-67-9, Acridine, 1-bromo-9-[(5-dimethylaminopentyl)amino]-7-methoxy- 111584-95-3, Acridine, 1-bromo-9-(p-dimethylaminoanilino)-7-methoxy- 131590-08-4, Acridine, 1-bromo-9-(2,2-dimethylhydrazino)-7-methoxy-
(as neoplasm inhibitor)

IT 260-94-6, Acridine
(derivs., as neoplasm inhibitors)

IT **55915-27-0**, Acridine, 6-bromo-9-[(3-dimethylaminopropyl)amino]-2-methoxy- **55935-12-1**, Acridine, 6-chloro-9-[(3-dimethylaminopropyl)amino]-2-methoxy- **94379-31-4**, Acridine, 1-bromo-9-[(3-dimethylaminopropyl)amino]-7-methoxy-
(as neoplasm inhibitor)

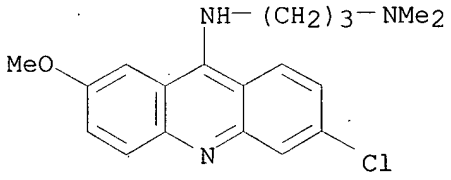
RN 55915-27-0 HCAPLUS

CN 1,3-Propanediamine, N'-(6-bromo-2-methoxy-9-acridinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



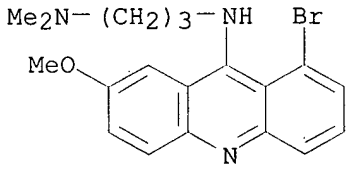
RN 55935-12-1 HCAPLUS

CN 1,3-Propanediamine, N'-(6-chloro-2-methoxy-9-acridinyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 94379-31-4 HCAPLUS

CN Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy- (6CI, 7CI) (CA INDEX NAME)



L73 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2003 ACS

AN 1960:86484 HCAPLUS

DN 54:86484

OREF 54:**16452e-h**

TI Tumor inhibiting compounds. III. The synthesis of some derivatives of 1-bromo-7-methoxy-9-aminoacridine

AU Ledochowski, Zygmunt; Ledochowski, Andrzej; Borowski, Edward; Radzikowski, Czeslaw; Morawski, Bohdan; Gawle, Kazimierz; Kozlowski, Edmund; Jakubowska, Lucja; Grabowska, Krystyna
CS Politechnika, Gdansk, Pol.

SO Roczniki Chem. (1960), 34, 53-62
DT Journal
LA English
CC 10G (Organic Chemistry: Heterocyclic Compounds)

AB cf. CA 54, 12140g. 2-Bromo-5-methoxybenzoic acid (231 g.), 190 g. m-bromoaniline, 138 g. anhyd. K2CO3, and 2 g. powd. Cu was boiled 2 hrs. in 700 ml. BuOH (I), the I distd. with steam, 5 l. boiling H2O added, and the whole filtered: Na2S (20 g.) and active C were added and the mixt. filtered. N-(3-Bromophenyl)-4-methoxyanthranilic acid (II) (m. 1945.degree., yield 71%) was pptd. by neutralization with 2.5% H2SO4. II (161 g.) was heated 2.5 hrs. to 140.degree. with 500 ml. POCl3 and the excess reagent distd. in vacuo. The residue was poured into 5 kg. ice-1 kg. concd. NH3, and extd. with CHCl3 to obtain 28% 1-bromo-7-methoxy-9-chloroacridine (III), m. 184.degree.. III was treated with PhOH, cooled, and the HCl salt pptd. with Et2O. Addn. of 2.5N KOH gave 90% 1-bromo-7-methoxy-9-phenoxyacridine, m. 140-1.degree.. The following HCl salts were obtained by condensation of III with N,N-dimethyldiamines (m.p. and % yield given): -HNNMe2 220.degree., 36; -HN(CH2)2NMe2, 220.5-1.5.degree., 22; -HN(CH2)3NMe2, 243.degree., 42; -HN(CH2)4NMe2, 239.5.degree., 45; -HN(CH2)5NMe2, 239.degree., 47; and -HNC6H4NMe2.2HCl, 218-20.degree. (decompn.), 37. Their tumor inhibiting activity was investigated on mice with Sarcoma Crockeri (Sa 180). Statistical data were given. For biol. details-see Patologia Polska 9, 331(1958).

IT Neoplasms
(inhibitors of)

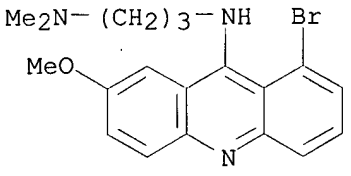
IT Acridine, 9-amino-1-bromo-7-methoxy-
(derivs.)

IT **23551-95-3**, Acridine, 1-bromo-9-[(3-dimethylaminopropyl)amino]-7-methoxy-, dihydrochloride 23551-96-4, Acridine, 1-bromo-9-[(4-dimethylaminobutyl)amino]-7-methoxy-, dihydrochloride 38135-48-7, m-Anisic acid, 6-m-bromoanilino- 95618-14-7, Acridine, 1-bromo-9-[(2-dimethylaminoethyl)amino]-7-methoxy-, dihydrochloride 99061-34-4, Acridine, 1-bromo-9-[(5-dimethylaminopentyl)amino]-7-methoxy-, dihydrochloride 100527-42-2, Acridine, 1-bromo-9-chloro-7-methoxy- 102160-44-1, Acridine, 1-bromo-7-methoxy-9-phenoxy- 111584-96-4, Acridine, 1-bromo-9-(p-dimethylaminoanilino)-7-methoxy-, dihydrochloride 132726-79-5, Acridine, 1-bromo-9-(2,2-dimethylhydrazino)-7-methoxy-, hydrochloride
(prepn. of)

IT **23551-95-3**, Acridine, 1-bromo-9-[(3-dimethylaminopropyl)amino]-7-methoxy-, dihydrochloride
(prepn. of)

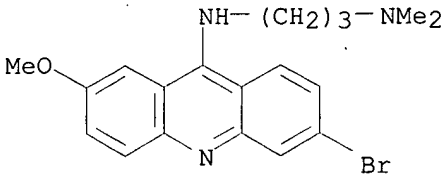
RN 23551-95-3 HCAPLUS

CN Acridine, 1-bromo-9-[[3-(dimethylamino)propyl]amino]-7-methoxy-, dihydrochloride (6CI, 7CI, 8CI) (CA INDEX NAME)



●2 HCl

L73 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1960:62739 HCAPLUS
DN 54:62739
OREF 54:**12140i,12141a**
TI Tumour-inhibiting compounds. II. The synthesis of some 3-bromo-7-methoxy-9-aminoacridine derivatives
AU Ledochowski, Andrzej; Ledochowski, Zygmunt
CS Politech., Gdansk, Pol.
SO Roczniki Chem. (1959), 33, 1299-305
DT Journal
LA English
CC 10G (Organic Chemistry: Heterocyclic Compounds)
AB The following N derivs. of 3-bromo-7-methoxy-9-aminoacridine have been prepd. in the way analogous to the synthesis of atabrine by Magidson, et al. (C.A. 30, 15163)(N-substituent, m.p. and % yield, resp.): NMe2.HCl, 212-13.degree., 65; (CH2)2N(Me)2.2HCl, 252.degree., 71; (CH2)3NMe2.2HCl, 237.degree., 58; (CH2)4NMe2.2HCl, 233.degree., 65; (CH2)5Me2.2HCl, 266.degree., 47; p-C6H4N(Me2).2HCl, - (decompd.), 23.
IT Acridine, 9-amino-6-bromo-2-methoxy-
(derivs.)
IT 6329-61-9, Isoquinoline, decahydro-
(derivs.)
IT 23551-97-5, Acridine, 6-bromo-9-[(4-dimethylaminobutyl)amino]-2-methoxy-, dihydrochloride **95428-49-2**, Acridine, 6-bromo-9-[(3-dimethylaminopropyl)amino]-2-methoxy-, dihydrochloride 95618-15-8, Acridine, 6-bromo-9-[(2-dimethylaminoethyl)amino]-2-methoxy-, dihydrochloride 99114-54-2, Acridine, 6-bromo-9-[(5-dimethylaminopentyl)amino]-2-methoxy-, dihydrochloride 111584-12-4, Acridine, 6-bromo-9-(p-dimethylaminoanilino)-2-methoxy-, dihydrochloride 131590-09-5, Acridine, 7-bromo-9-(2,2-dimethylhydrazino)-2-methoxy- 132726-80-8, Acridine, 7-bromo-9-(2,2-dimethylhydrazino)-2-methoxy-, hydrochloride
(prepn. of)
IT 93901-88-3, Ketone, decahydro-4a-hydroxy-2-methyl-4-isoquinolyl p-methoxyphenyl
(stereoisomers, and derivs.)
IT **95428-49-2**, Acridine, 6-bromo-9-[(3-dimethylaminopropyl)amino]-2-methoxy-, dihydrochloride
(prepn. of)
RN 95428-49-2 HCAPLUS
CN Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride (6CI, 7CI) (CA INDEX NAME)



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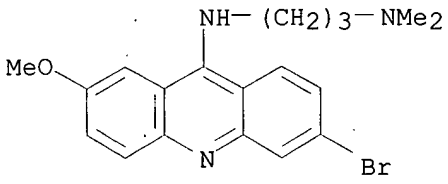
L73 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2003 ACS
AN 1960:62738 HCAPLUS
DN 54:62738
OREF 54:**12140g-i**
TI Tumour-inhibiting compounds. I. The synthesis of some N,N-dimethyl-.alpha.,.omega.-diaminoalkanes
AU Ledochowski, Zygmunt; Ledochowski, Andrzej; Chimiak, Andrzej; Dutkiewicz, Barbara; Bogucka, Maria; Wysocka, Barbara; Sokolowska, Teresa; Wasielewski, Czeslaw; Stefaniak, Lech
CS Politech., Gdansk, Pol.
SO Roczniki Chem. (1959), 33, 1291-8
DT Journal
LA English
CC 10G (Organic Chemistry: Heterocyclic Compounds)
AB 3-Bromo-7-methoxy-9-aminoacridine N-derivs. were investigated. The side chains to be attached of the general formula H2N(CH2)mNMe2 (I) with m = 2, 3, 4, and 5 were prepd. Attempts to prepare I (m = 1) were unsuccessful. Only its deriv., Cl3CCONH CH2NMe3, 83.5-4.degree., was prepd. I (m = 2) and I (m = 3) (b. 133-3.5.degree., yield 66%) were obtained by redn. of the resp. nitriles with Na in EtOH or BuOH, resp. I (m = 5), b. 182.degree., 11.5%, nD20 1.4500, was obtained by addn. of a satd. aq. soln. of .epsilon.-dimethylaminocaproamide to NaOBr soln., followed by heating to 70.degree., extn. with Et2O, and distn. at low pressure.
IT Neoplasms
(inhibitors of)
IT Acridine, 9-amino-6-bromo-2-methoxy-
Acridine, 9-amino-6-bromo-2-methoxy-
(derivs.)
IT 43192-52-5, Methanediamine, N,N-dimethyl-
(attempted prepn. of)
IT 108-00-9, Ethylenediamine, N,N-dimethyl- 109-55-7, 1,3-Propanediamine, N,N-dimethyl- 3209-46-9, 1,5-Pentanediamine, N,N-dimethyl- 3529-10-0, 1,4-Butanediamine, N,N-dimethyl- 23551-97-5, Acridine, 6-bromo-9-[(4-dimethylaminobutyl)amino]-2-methoxy-, dihydrochloride **95428-49-2**, Acridine, 6-bromo-9-[(3-dimethylaminopropyl)amino]-2-methoxy-, dihydrochloride 95618-15-8, Acridine, 6-bromo-9-[(2-dimethylaminoethyl)amino]-2-methoxy-, dihydrochloride 98070-95-2, Acetamide, 2,2,2-trichloro-N-(dimethylaminomethyl)- 99114-54-2, Acridine, 6-bromo-9-[(5-dimethylaminopentyl)amino]-2-methoxy-, dihydrochloride 131590-09-5, Acridine, 7-bromo-9-(2,2-dimethylhydrazino)-2-methoxy- 132726-80-8, Acridine, 7-bromo-9-(2,2-dimethylhydrazino)-2-methoxy-, hydrochloride
(prepn. of)
IT **95428-49-2**, Acridine, 6-bromo-9-[(3-dimethylaminopropyl)amino]-2-methoxy-, dihydrochloride
(prepn. of)
RN 95428-49-2 HCAPLUS
CN Acridine, 6-bromo-9-[[3-(dimethylamino)propyl]amino]-2-methoxy-, dihydrochloride (6CI, 7CI) (CA INDEX NAME)



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L75 ANSWER 1 OF 2 HCAOLD COPYRIGHT 2003 ACS
AN **CA60:14471g** CAOLD
TI tumor-inhibiting compds. - (XVIII) relation between antitumor activity and the chem. structure of some N-substituted acridones and thioacridones (1)
AU Ledochowski, Zygmunt; Wysocka-Skrzela, B.
IT **23552-04-7** 23552-11-6 23552-16-1 23552-17-2 96001-53-5 96712-06-0 98075-35-5 100213-31-8 100265-11-0
IT **23552-04-7**
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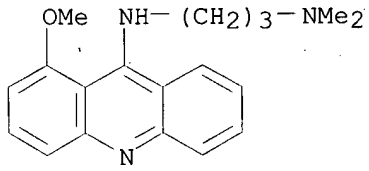

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L75 ANSWER 2 OF 2 HCAOLD COPYRIGHT 2003 ACS
AN **CA56:1428d** CAOLD
TI tumor-inhibiting compds. - (IX) synthesis of (4-dimethylaminobutyl-amino)benzacridines and relation between tumor-inhibiting activity and structure of some acridine and quinoline derivs. and semiproducts for their synthesis
AU Ledochowski, Zygmunt; Ledochowski, A.; Radzikowski, C.; Wysocka-Skrzela, B.; Konopa, J.; Jurkiewicz, Z.
IT **23551-95-3** 23551-98-6 95949-45-4 96370-51-3 96868-08-5 101034-77-9
IT **23551-95-3**
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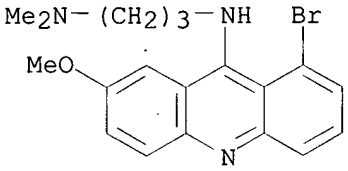

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L31           1 S L26 AND L27-L30
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L33           1 S L26 AND L32
L34           1 S L31,L33
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                E E4+ALL
L35        5492 S E7,E6
                E E21+ALL
L36        3287 S E5,E4
                E E15+ALL
L37       49327 S E5,E4
                E E3+ALL
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L39           1 S L26 AND L35-L38
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L44       24179 S E3,E2+NT
L45           1 S L26 AND L41-L44
L46           1 S L34,L39,L40,L45
L47           2 S L26 AND ?HYPERPLAS?
L48           1 S L26 AND ?AUTOIMMUN?
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L56         16195 S E5+NT
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L58           783 S E3+NT
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L59         18741 S E4,E5,E3+NT
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L61         25405 S AUTOIMMUN?(L)(LYMPH? OR THYROID?) OR ?EOSINOPHIL?
L62             0 S L26 AND L56-L61
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                  E E VILLAR H/AU
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                  E LABORDE E/AU
L28           48 S E3-E7
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L31            1 S L26 AND L27-L30
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L32           35 S E3-E9
L33            1 S L26 AND L32
L34            1 S L31,L33
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                  E E4+ALL
L35         5492 S E7,E6
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L36         3287 S E5,E4
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L53           1 S L26 AND ?APOPTO?
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L70           1 S WO20000076982/PN
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L72          14 S L22 AND L26
L73          16 S L22,L72
L74           2 S L22 NOT L72

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                E AUTOIMMUN/CT
L81          50 S E17+NT AND L80
L82           0 S E117+NT AND L80
                E HYPERPLASIA/CT
L83           3 S E3+NT AND L80
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L84          27 S E7+NT AND L80
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L85         130 S E3+NT AND L80
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L88           0 S E5+NT AND L80
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L91         103 S L78 AND L81-L89
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